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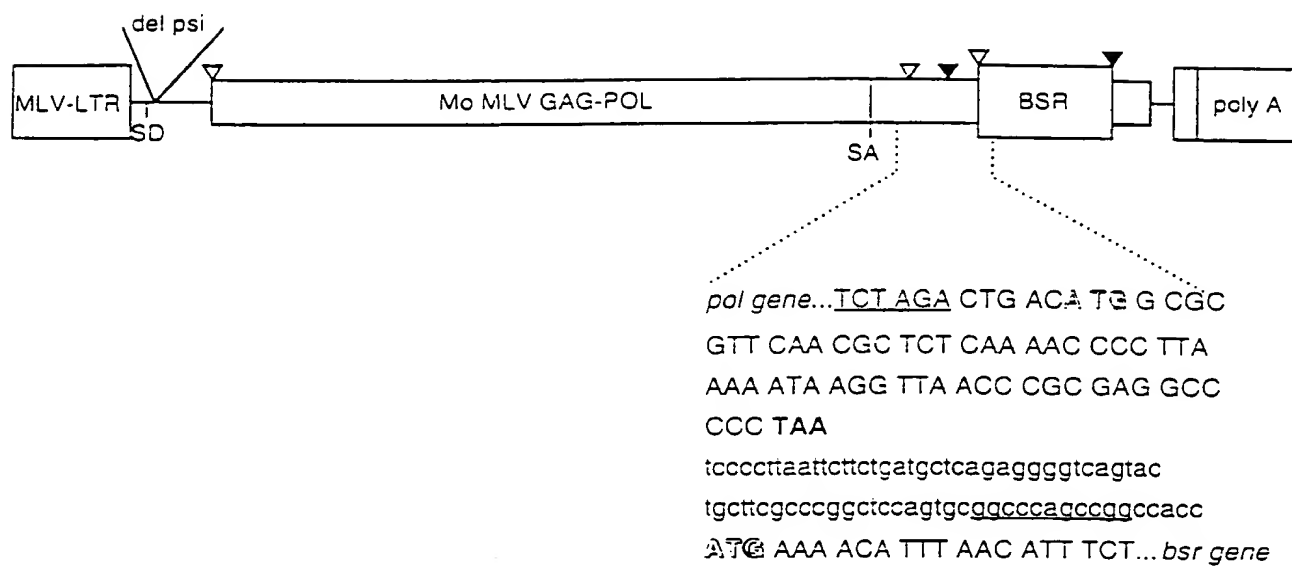


Figure 1. Schematic structure of CeB expression vector

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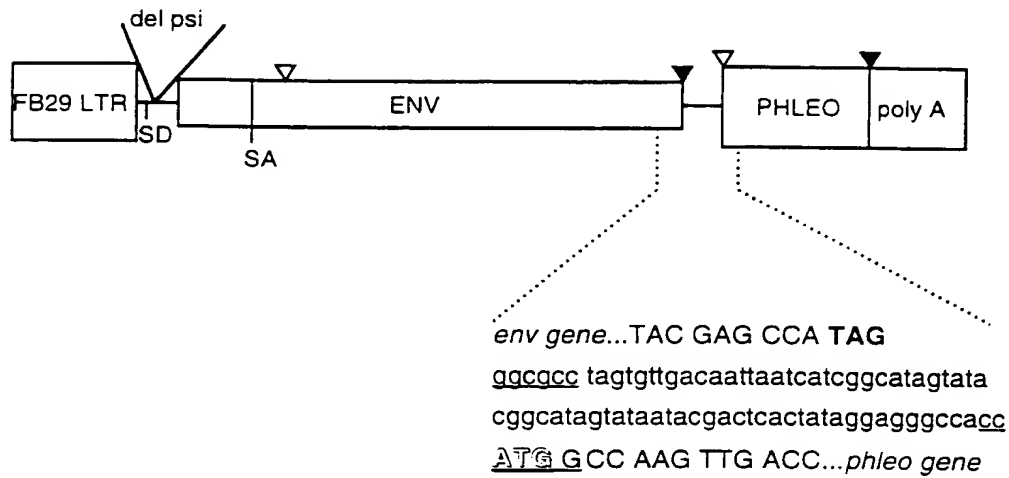


Figure 2. Schematic structure of FBdelPAS expression vector

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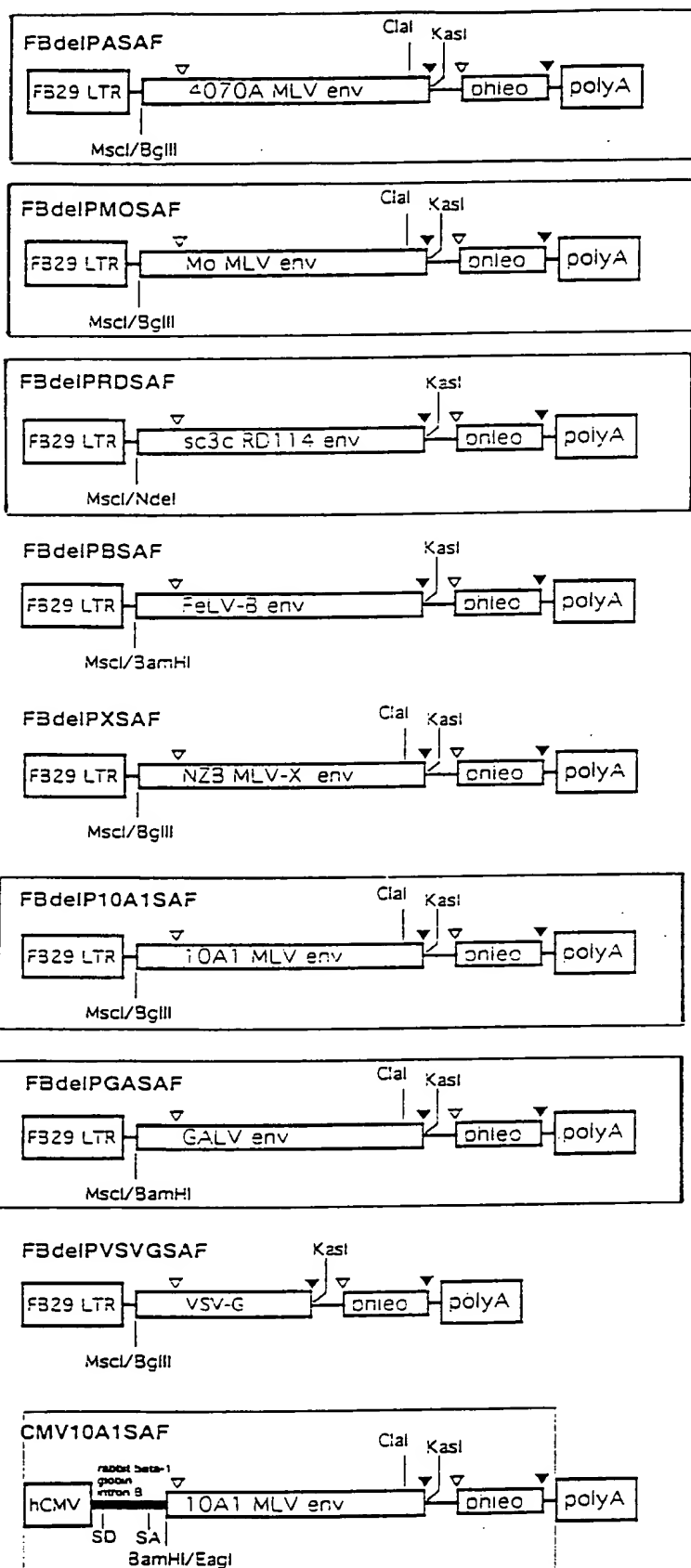


Figure 3. Schematic structure of env expression vectors

SUBSTITUTE SHEET (RULE 26)

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NGAGCTCAGGACAGGTAGAAAGAATGAATAGAACATAAAAAGAGACCCTTACTAAATTGA 60  
CCTTAGAGACTGGCTTAAAAGATTGGAGACGCCTCCTATCTCTGGCTTTGTAAAGAGCCA 120  
GAAATACGCCCCAACCGTTTTTCGGCTCACCCCATATGAAATCCTTTATGGGGGACCCCCC 180  
CTTTGTCAACCTTGCTCAATTCCTTCTCCCCCTCCGATCCTAAGACTGATTTACAAGCCC 240  
GACTAAAAGGGCTGCAAGGCGTGCAGGCCCAAATCTGGACACCCTGGCCGAATTGTACC 300  
GGCCAGGACATCCACAACTAGCCACCCATTTTCAGGTGGGAGACTCCGTGTACGTCCGGC 360  
GGCACCGCTCTCAAGGATTGGAGCCTCGTTGGAAGGGACCTTACATCGTCTGCTGACCA 420  
CGCCCCACCGCCATAAAGGTTGACGGGATCGCCGCCTGGATTACGCATCGCACGCCAAGG 480  
CAGCCCCAAAAACCCCTGGACCAGAACTCCCAAAACCTGGAAGCTCCGCCGTTCCGGAGA 540  
ACCCTCTTAAGATAAGACTCTCCCGTGTCTGACTGCTAATCCACCTTGTCCCTGTACTAA 600  
CCCCAAATGAACTCCCAACAGGAATGGTCATTTTATGTAGCCTAATAATAGTTCGGGCA 660  
GGGTTTGACGACCCCCGCAAGGCTATCGCATTAGTACAAAAACAACATGGTAAACCATGC 720  
GAATGCAGCGGAGGGCAGGTATCCGAGGCCCCACCGAACTCCATCCAACAGGTAACCTGC 780  
CCAGGCAAGACGGCCTACTTAATGACCAACCAAAAATGGAATGCAGAGTCACTCCAAAA 840  
ATCTCACCTAGCGGGGGAGAAGTCCAGAAGTGGCCCTGTAACACTTTCCAGGACTCGATG 900  
CACAGTTCTTGTTATACTGAATACCGGCAATGCAGGCGAATTAATAAGACATACTACAG 960  
GCCACCTTGCTTAAAATACGGTCTGGGAGCCTCAACGAGGTACAGATATTACAAAACCCC 1020  
AATCAGCTCCTACAGTCCCCTTGTTAGGGGCTCTATAAATCAGCCCGTTTGCTGGAGTGCC 1080  
ACAGCCCCCATCCATATCTCCGATGGTGGAGGACCCCTCGATACTAAGAGAGTGTGGACA 1140  
GTCCAAAAAAGGCTAGAACAATTCATAAGGCTATGACTCCTGAACTTCAATACCACCCC 1200  
TTAGCCCTGCCCCAAGTCAGAGATGACCTTAGCCTTGATGCACGGACTTTTGATATCCTG 1260  
AATACCACCTTTTAGGTTACTCCAGATGTCCAATTTTAGCCTTGCCCAAGATTGTTGGCTC 1320  
TGTTTAAAACTAGGTACCCCTACCCCTCTTGCGATACCCACTCCCTCTTTAACCTACTCC 1380  
CTAGCAGACTCCCTAGCGAATGCCTCCTGTGAGATTATACCTCCCTCTTGTTCAACCG 1440  
ATGCAGTTCTCCAACCTCGTCTGTTTATCTTCCCCTTTTATTAACGATACGGAACAAATA 1500  
GACTTAGGTGCAGTCACCTTTACTAAGTGCACCTCTGTAGCCAATGTCAGTAGTCCTTTA 1560  
TGTGCCCTAAACGGGTCAGTCTTCTCTGTGGAAATAACATGGCATAACCTATTTACCC 1620  
CAAACTGGACCAGACTTTGCGTCCAAGCCTCCCTCCTCCCCGACATTGACATCAACCCG 1680  
GGGGATGAGCCAGTCCCCATTCTGCTGATCATTATATACATAGACCTAAACGAGCT 1740  
GTACAGTTCATCCCTTTACTAGCTGGACTGGGAATCACCGCAGCATTACCACCGGAGCT 1800  
ACAGGCCTAGGTGTCTCCGTCACCCAGTATACAAAATTATCCCATCAGTTAATATCTGAT 1860  
GTCCAAGTCTTATCCGGTACCATAACAAGATTTACAAGACCAGGTAGACTCGTTAGCTGAA 1920  
GTAGTTCTCCAAAATAGGAGGGGACTGGACCTACTAACGGCAGAACAGGAGGAATTTGT 1980  
TTAGCCTTACAAGAAAAATGCTGTTTTTATGCTAACAGTCAAGGAATTGTGAGAAACAAA 2040  
ATAAGAACCCTACAAGAAGAATTACAAAAACGCAGGGAAAGCCTGGCAACCAACCCTCTC 2100  
TGGACCGGGCTGCAGGGCTTTCTTCCGTACCTCCTACCTCTCCTGGGACCCCTACTCACC 2160  
CTCCTACTCATACTAACCATTGGGCCATGCGTTTTTCAGTCGCCTCATGGCCTTCATTAAT 2220  
GATAGACTTAATGTTGTACATGCCATGGTGCTGGCCAGCAATACCAAGCACTCAAAGCT 2280  
GAGGAAGAAGCTCAGGATTGAGCTTCCGGGACAAAAGCAGGGGGGAATGAGAAGTCAGAA 2340  
CCCCCACCTTTGCTACATAAATAACCGCTTTCATTTTCGCTTCTGTAAAACGCTTATGCG 2400  
CCCCACCCTAGCCGGAAAGTCCCCAGCCGCTACGCAACCCGGGCCCCGAGTTGCATCAGC 2460  
CGTTCGCAACCCGGGCTCCGAGTTGCATCAGCCGAAAGAACTTCATTTCCCAAGCTT 2518

Fig. 4

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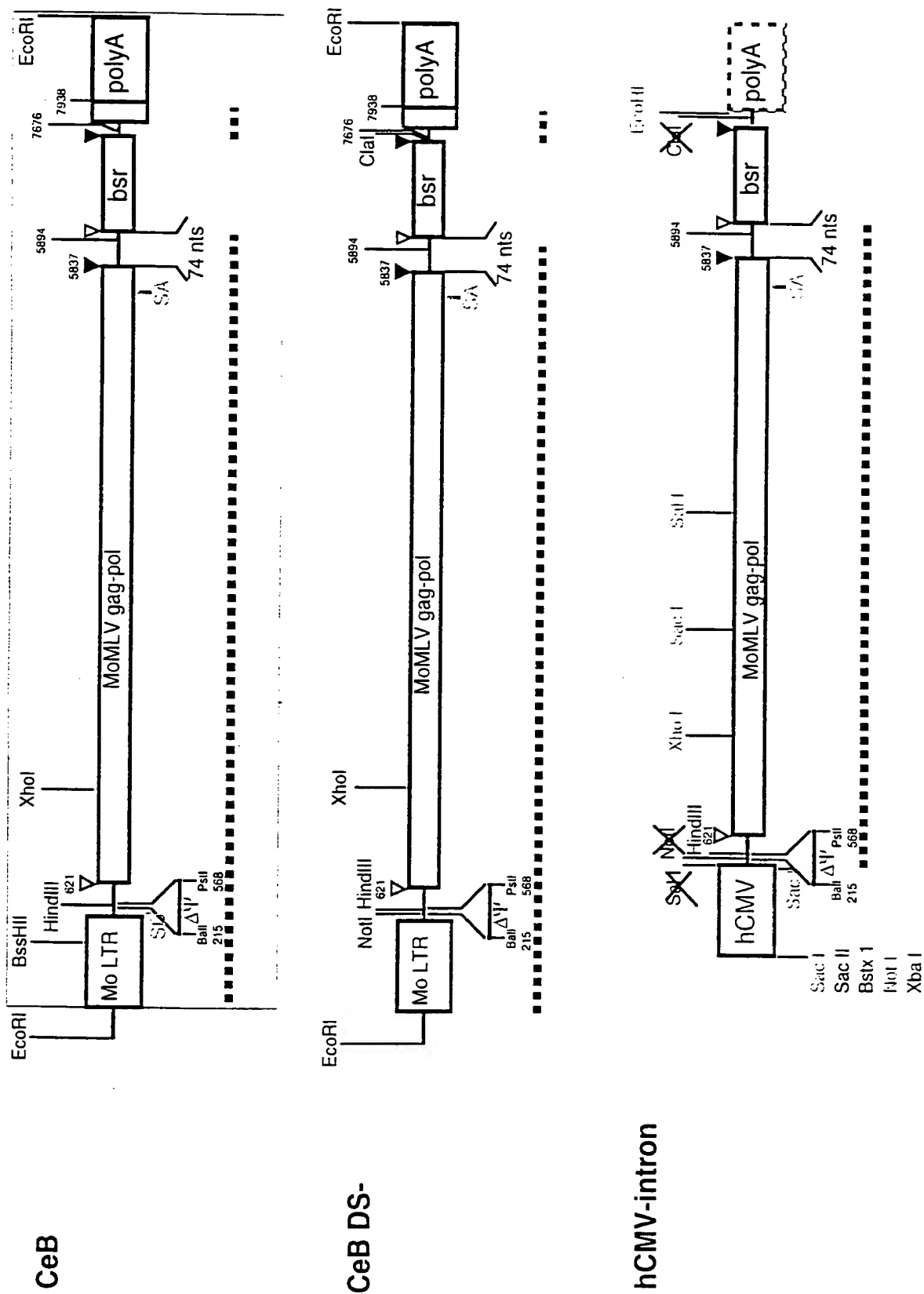
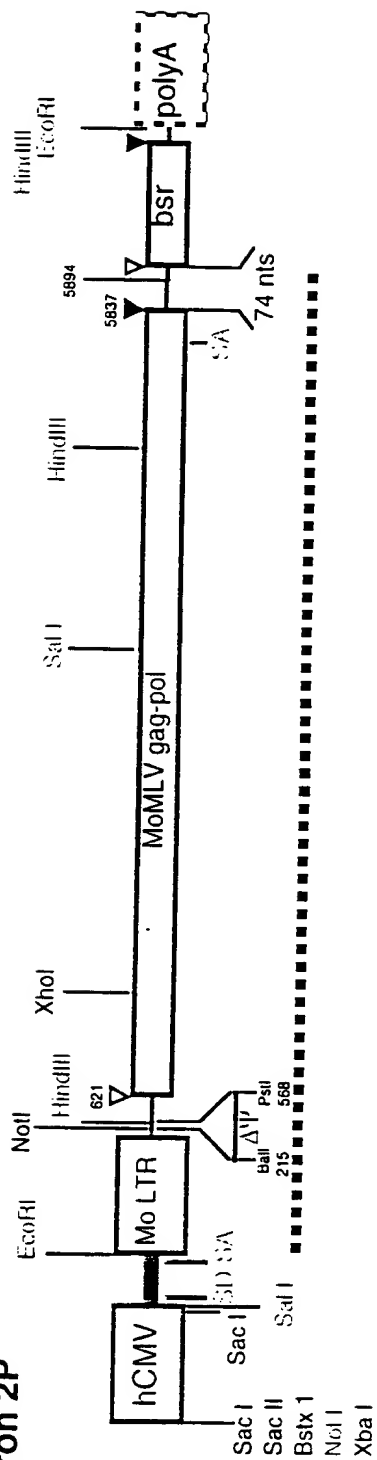
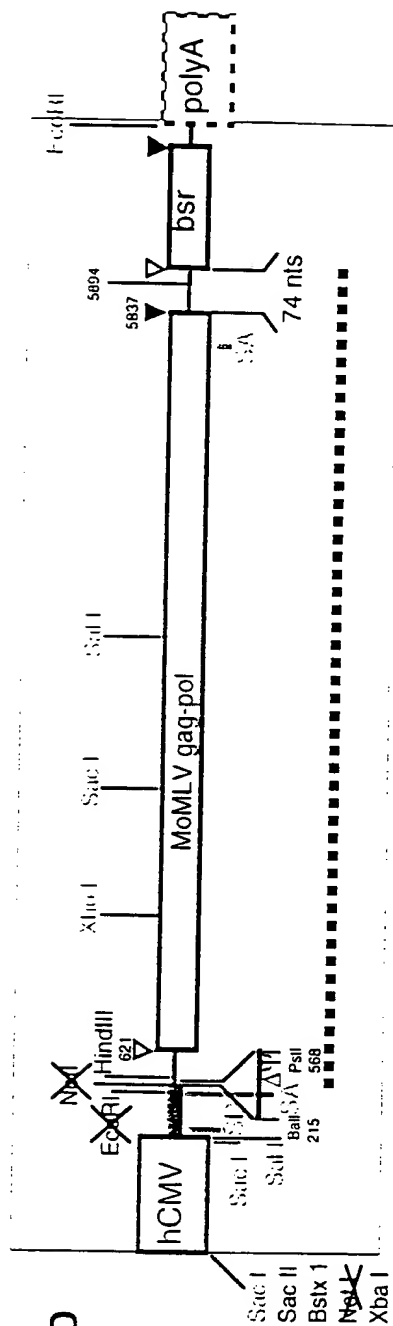


Figure 5. Genetic structure of gag-pol constructs (page 1/3)



## hCMV+intron, hCMV+intronkaSD



**Figure 5. Genetic structure of gag-pol constructs (page 2/3)**

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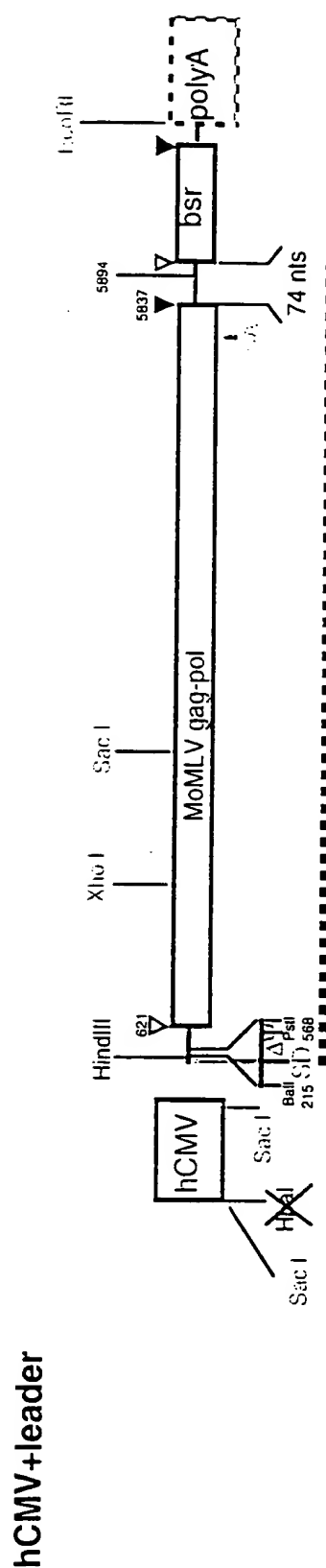
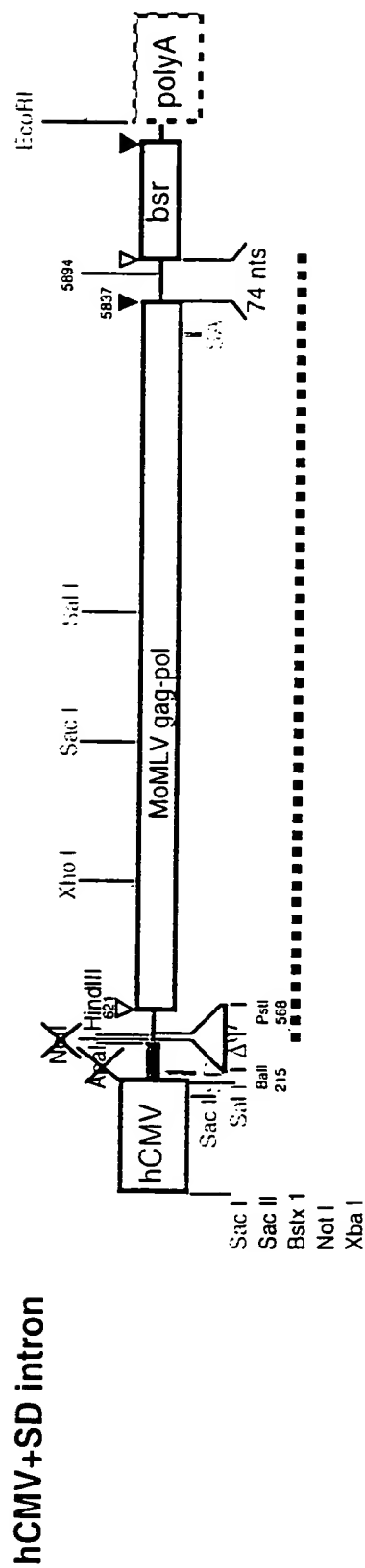


Figure 5. Genetic structure of gag-pol constructs (page 3/3)

Figure 6. CeB Sequence

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1

AATGAAAGAC	CCCACCTGTA	GGTTTGGCAA	GCTAGCTTAA	GTAACGCCAT	TTTGCAAGGC	60
ATGGAAAAAT	ACATAACTGA	GAATAGAGAA	GTTCAGATCA	AGGTCAGGAA	CAGATGGAAC	120
AGCTGAATAT	GGGCCAAACA	GGATATCTGT	GGTAAGCAGT	TCCTGCCCCG	GCTCAGGGCC	180
AAGAACAGAT	GGAACAGCTG	AATATGGGCC	AAACAGGATA	TCTGTGGTAA	GCAGTTCTCTG	240
CCCCGGCTCA	GGGCCAAGAA	CAGATGGTCC	CCAGATGCGG	TCCAGCCCTC	AGCAGTTTCT	300
AGAGAACCAT	CAGATGTTTC	CAGGGTGCCC	CAAGGACCTG	AAATGACCCT	GTGCCTTATT	360
TGAACTAACC	AATCAGTTCG	CTTCTCGCTT	CTGTTGCGCG	GCTTCTGCTC	CCCAGCTCA	420
ATAAAAGAGC	CCACAACCCC	TCACTCGGGG	CGCCAGTCCT	CCGATTGACT	GAGTCGCCCC	480
GGTACCCGTG	TATCCAATAA	ACCCTCTTGC	AGTTGCATCT	GACTTGTGGT	CTCGCTGTTC	540
CTTGGGAGGG	TCTCTCTGA	GTGATTGACT	ACCCGTCAGC	GGGGGTCTTT	CATTTGGGGG	600
CTCGTCCGGG	ATCGGGAGAC	CCCTGCCCAG	GGACCACCGA	CCCACCACCG	GGAGGTAAGC	660
TGGAAGCTTC	TGCAGCATCG	TTCTGTGTTG	TCTCTGTCTG	ACTGTGTTTC	TGTATTTGTC	720
TGAGAATATG	GGCCAGACTG	TTACCACTCC	CTTAAGTTTG	ACCTTAGGTC	ACTGGAAGA	780
GTCTGAGCGG	ATCGCTCACA	ACCAGTCGGT	AGATGTCAAG	AAGAGACGTT	GGGTACCTT	840
CTGCTCTGCA	GAATGGCCAA	CCTTTAACGT	CGGATGGCCG	CGAGACGGCA	CCTTTAACCG	900
AGACCTCATC	ACCCAGGTTA	AGATCAAGGT	CTTTTCACCT	GGCCCGCATG	GACACCCAGA	960
CCAGGTCCCC	TACATCGTGA	CCTGGGAAGC	CTTGGCTTTT	GACCCCCCTC	CCTGGGTCAA	1020
GCCCTTTGTA	CACCCTAAGC	CTCCGCCTCC	TCTTCTCTCA	TCCGCCCCGT	CTCTCCCCCT	1080
TGAACCTCCT	CGTTCGACCC	CGCCTCGATC	CTCCCTTTAT	CCAGCCCTCA	CTCCTTCTCT	1140
AGGCGCCAAA	CCTAAACCTC	AAGTCTTTTC	TGACAGTGGG	GGGCCGCTCA	TCGACCTACT	1200
TACAGAAGAC	CCCCCGCCTT	ATAGGGACCC	AAGACCACCC	CCTTCCGACA	GGGACGGAAA	1260
TGGTGGAGAA	GCGACCCCTG	CGGGAGAGGC	ACCGGACCCC	TCCCCAATGG	CATCTCGCCT	1320
ACGTGGGAGA	CGGGAGCCCC	CTGTGGCCGA	CTCCACTACC	TCGCAGGCAT	TCCCCCTCCG	1380
CGCAGGAGGA	ACCGGAGGAA	TTCAATACTG	GCCGTTCTCT	TCTTCTGACC	TTTACAAGTG	1440
GAAAAATAAT	AACCTTCTCT	TTTCTGAAGA	TCCAGGTAAA	CTGACAGCTC	TGATCAGATC	1500
TGTTCTCATC	ACCCATCAGC	CCACCTGGGA	CGACTGTCAG	CAGCTGTTGG	GGACTCTGCT	1560
GACCGGAGAA	GAAAAACAAC	GGGTGCTCTT	AGAGGCTAGA	AAGGCGGTGC	GGGGCGATGA	1620
TGGGCGCCCC	ACTCAACTGC	CCAATGAAGT	CGATGCCGCT	TTTCCCCCTG	AGCGCCCAGA	1680
CTGGGATTAC	ACCACCTAGG	CAGGTAGGAA	CCACCTAGTC	CACATCGCC	AGTTGCTCCT	1740
AGCGGGTCTC	CAAAACGCGG	GCAGAAGCCC	ACCACAATTTG	GCCAAGGTAA	AAGGAATAAC	1800
ACAAGGGCCC	AATGAGTCTC	CCTCGGCCTT	CCTAGAGAGA	CTTAAGGAAG	CCTATCGCAG	1860
GTACACTCCT	TATGACCCTG	AGGACCCAGG	GCAAGAAACT	AATGTGTCTA	TGTCTTTTCAT	1920
TTGGCAGTCT	GCCCCAGACA	TTGGGAGAAA	GTTAGAGAGG	TTAGAAGATT	TAAAAACAA	1980
GACGCTTGGA	GATTTGGTTA	GAGAGGCAGA	AAAGATCTTT	AATAAACGAG	AAACCCCGGA	2040
AGAAAGAGAG	GAACGTATCA	GGAGAGAAAC	AGAGGAAAAA	GAAGAACGCC	GTAGGACAGA	2100
GGATGAGCAG	AAAGAGAAAG	AAAGAGATCG	TAGGAGACAT	AGAGAGATGA	GCAAGCTATT	2160
GGCCACTGTC	GTTAGTGGAC	AGAAACAGGA	TAGACAGGGA	GGAGAACGAA	GGAGGTCCCA	2220
ACTCGATCGC	GACCAGTGTG	CCTACTGCAA	AGAAAAGGGG	CACTGGGCTA	AAGATTGTCC	2280
CAAGAAACCA	CGAGGACCTC	GGGGACCAAG	ACCCAGACC	TCCCTCCTGA	CCCTAGATGA	2340
CTAGGGAGGT	CAGGGTCAGG	AGCCCCCCCC	TGAACCCAGG	ATAACCCCTCA	AAGTCGGGGG	2400
GCAACCCGTC	ACCTTCTCTG	TAGATACTGG	GGCCCAACAC	TCCGTGCTGA	CCCAAATCC	2460
TGGACCCCTA	AGTGATAAGT	CTGCCTGGGT	CCAAGGGGCT	ACTGGAGGAA	AGCGGTATCG	2520
CTGGACCACG	GATCGCAAAAG	TACATCTAGC	TACCGGTAAG	GTCACCCACT	CTTTCCTCCA	2580
TGTACCAGAC	TGTCCCTATC	CTCTGTTAGG	AAGAGATTTG	CTGACTAAAC	TAAACCCCCA	2640
AATCCACTTT	GAGGGATCAG	GAGCTCAGGT	TATGGGACCA	ATGGGGCAGC	CCCTGCAAGT	2700
GTTGACCCTA	AATATAGAAG	ATGAGCATCG	GCTACATGAG	ACCTCAAAAG	AGCCAGATGT	2760
TTCTCTAGGG	TCCACATGGC	TGTCTGATTT	TCCTCAGGCC	TGGGCGGAAA	CCGGGGGCAT	2820
GGGACTGGCA	GTTTCGCCAAG	CTCCTCTGAT	CATACCTCTG	AAAGCAACCT	CTACCCCCGT	2880
GTCCATAAAA	CAATACCCCA	TGTCACAAGA	AGCCAGACTG	GGGATCAAGC	CCCACATACA	2940
GAGACTGTTG	GACCAGGGAA	TACTGGTACC	CTGCCAGTCC	CCCTGGAACA	CGCCCCGTCT	3000
ACCCGTTAAG	AAACCAGGGA	CTAATGATTA	TAGGCCTGTC	CAGGATCTGA	GAGAAGTCAA	3060
CAAGCGGGTG	GAAGACATCC	ACCCACCCGT	GCCCAACCCCT	TACAACCTCT	TGAGCGGGCT	3120
CCCACCGTCC	CACCATGTTG	ACACTGTGCT	TGATTTAAAG	GATGCCTTTT	TCTGCCTGAG	3180
ACTCCACCCC	ACCAGTCAGC	CTCTCTTCGC	CTTTGAGTGG	AGAGATCCAG	AGATGGGAAT	3240
CTCAGGACAA	TTGACCTGGA	CCAGACTCCC	ACAGGGTTTC	AAAAACAGTC	CCACCCCTGTT	3300
TGATGAGGCA	CTGCACAGAG	ACCTAGCAGA	CTTCCGGATC	CAGCACCCAG	ACTTGATCCT	3360
GCTACAGTAC	GTGGATGACT	TACTGCTGGC	CGCCACTTCT	GAGCTAGACT	GCCAACAAGG	3420
TACTCGGGCC	CTGTTACAAA	CCTAGGGAA	CTCGGGTAT	CGGGCCTCGG	CCAAGAAAGC	3480
CCAAATTTGC	CAGAAACAGG	TCAAGTATCT	GGGGTATCTT	CTAAAAAGAG	GTCAGAGATG	3540
GCTGACTGAG	GCCAGAAAAG	AGACTGTGAT	GGGGCAGCCT	ACTCCGAAGA	CCCCCTGACA	3600
ACTAAGGGAG	TTCTTAGGGA	CGGCAGGCTT	CTGTCGCCTC	TGGATCCCTG	GGTTTGCAGA	3660
AATGGCAGCC	CCCTTGATAC	CTCTCACCAA	AACGGGGACT	CTGTTTAATT	GGGGCCCAGA	3720
CCAAACAAAAG	GCCTTCAAG	AAATCAAGCA	AGCTCTTCTA	ACTGCCCCAG	CCCTGGGGTT	3780
GCCAGATTTG	ACTAAGCCCT	TTGAACCTCT	TGTCGACGAG	AAGCAGGGCT	ACGCCAAAGG	3840
TGTCCTAACG	CAAAAACCTG	GACCTTGGCG	TCGGCCGGTG	GCCTACCTGT	CCAAAAAGCT	3900
AGACCCAGTA	GCAGCTGGGT	GGCCCCCTTG	CCTACGGATG	GTAGCAGCCA	TTGCCGTACT	3960
GACAAAGGAT	GCAGGCAAGC	TAACCATGGG	ACAGCCACTA	GTCATTCTGG	CCCCCATGCT	4020
AGTAGAGGCA	CTAGTCAAAC	AACCCCCCGA	CCGCTGGCTT	TCCAACGCCC	GGATGACTCA	4080



Figure 6. CeB Sequence

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CTATCAGGCC	TTGCTTTTGG	ACACGGACCG	GGTCCAGTTC	GGACCGGTGG	TAGCCCTGAA	4140
CCCGGCTACG	CTGCTCCAC	TGCTTGAGGA	AGGGCTGCAA	CACAACTGCC	TTGATATCCT	4200
GGCCGAAGCC	CACGGAACCC	GACCCGACCT	AACGGACCAG	CCGCTCCCAG	ACGCCGACCA	4260
CACCTGGTAC	ACGGATGGAA	GCAGTCTCTT	ACAAGAGGGA	CAGCGTAAGG	CGGGAGCTGC	4320
GGTGACCACC	GAGACCGAGG	TAATCTGGGC	TAAAGCCCTG	CCAGCCGGGA	CATCCGCTCA	4380
GCGGGCTGAA	CTGATAGCAC	TCACCCAGGC	CCTAAAGATG	GCAGAAGGTA	AGAAGCTAAA	4440
TGTTTATACT	GATAGCCGTT	ATGCTTTTGC	TACTGCCCAT	ATCCATGGAG	AAATATACAG	4500
AAGGCGTGGG	TTGCTCACAT	CAGAAGGCAA	AGAGATCAAA	AATAAAGACG	AGATCCTTGGC	4560
CCTACTAAAA	GCCCTCTTTC	TGCCCCAAAG	ACTTAGCATA	ATCCATTGTC	CAGGACATCA	4620
AAAGGGACAC	AGCGCCGAGG	CTAGAGGCAA	CCGGATGGCT	GACCAAGCGG	CCCGAAAGGC	4680
AGCCATCACA	GAGACTCCAG	ACACCTCTAC	CCTCCTCATA	GAAAATTTCAT	CACCCTACAC	4740
CTCAGAACAT	TTTCATTACA	CAGTGACTGA	TATAAAGGAC	CTAACCAAGT	TGGGGGCCAT	4800
TTATGATAAA	ACAAAGAAGT	ATTGGGTCTA	CCAAGGAAAA	CCTGTGATGC	CTGACCAGTT	4860
TACTTTTGAA	TTATTAGACT	TTCTTCATCA	GCTGACTCAC	CTCAGCTTCT	CAAAAATGAA	4920
GGCTCTCCTA	GAGAGAAGCC	ACAGTCCCTA	CTACATGCTG	AACCGGGATC	GAACACTCAA	4980
AAATATCACT	GAGACCTGCA	AAGCTTGTGC	ACAAGTCAAC	GCCAGCAAGT	CTGCCGTAA	5040
ACAGGGAAC	AGGGTCCGCG	GGCATCGGCC	CGGCATCAT	TGGGAGATCG	ATTTACCCGA	5100
GATAAAGCCC	GGATTGTATG	GCTATAAATA	TCTTCTAGTT	TTTATAGATA	CCTTTCTGG	5160
CTGGATAGAA	GCCTTCCCAA	CCAAGAAAGA	AACCGCCAAG	GTCGTAACCA	AGAAGCTACT	5220
AGAGGAGATC	TTCCCCAGGT	TCGGCATGCC	TCAGGTATTG	GGAAGTGACA	ATGGGCCTGC	5280
CTTCGTCTCC	AAGGTGAGTC	AGACAGTGCC	CGATCTGTTG	GGGATTGATT	GGAAATTACA	5340
TTGTGCATAC	AGACCCCAAA	GCTCAGGCCA	GGTAGAAAGA	ATGAATAGAA	CCATCAAGGA	5400
GACTTTAACT	AAATTAACGC	TTGCAACTGG	CTCTAGAGAC	TGGGTGCTCC	TACTCCCTTT	5460
AGCCCTGTAC	CGAGCCCGCA	ACACGCCCGG	CCCCCATGGC	CTCACCCCAT	ATGAGATCTT	5520
ATATGGGGCA	CCCCCGCCCC	TTGTAAACTT	CCCTGACCCT	GACATGACAA	GAGTTACTAA	5580
CAGCCCCCTC	CTCCAAGCTC	ACTTACAGGC	TCTCTACTTA	GTCCAGCACG	AAGTCTGGAG	5640
ACCTCTGGCG	GCAGCCTACC	AAGAACAAC	GGACCGACCG	GTGGTACCTC	ACCCTTACCG	5700
AGTCGGCGAC	ACAGTGTGGG	TCCGCCGACA	CCAGACTAAG	AACCTAGAAG	CTCGCTAGAA	5760
AGGACCTTAC	ACAGTCCTGC	TGACCACCCC	CACCGCCCTC	AAAGTAGACG	GCATCGCAGC	5820
TTGGATAGAC	GCCGCCACG	TGAAGGCTGC	CGACCCCGGG	GGTGGACCAT	CCTCTAGACT	5880
GACATGGCGC	GTTCAACGCT	CTCAAAACCC	CTTAAAAATA	AGGTAAACCC	GCGAGGCCCC	5940
CTAATCCCC	TAATTTCTCT	GATGCTCAGA	GGGGTCAGTA	CTGCTTCGCC	CGGCTCCAGT	6000
GCGGCCAGC	CGGCCACCAT	GAAAACATTT	AACATTTCTC	AACAAGATCT	AGAATAGTA	6060
GAAGTAGCGA	CAGAGAAGAT	TACAATGCTT	TATGAGGATA	ATAAACATCA	TGTGGGAGCG	6120
GCAATTTCGA	CGAAAACAGG	AGAAATCATT	TCGGCAGTAC	ATATTGAAGC	GTATATAGGA	6180
CGAGTAAC	TTTGTGCAGA	AGCCATTGCG	ATTGGTAGTG	CAGTTTCGAA	TGGACAAAAG	6240
GATTTTGACA	CGATTGTAGC	TGTTAGACAC	CCTTATTCTG	ACGAAGTAGA	TAGAAGTATT	6300
CGAGTGGTAA	GTCCTTGTGG	TATGTGTAGG	GAGTTGATTT	CAGACTATGC	ACCAGATTGT	6360
TTTGTGTAA	TAGAAATGAA	TGGCAAGTTA	GTCAAAAC	CGATTGAAGA	ACTCATTTCA	6420
CTCAAAATATA	CCCGAAATTA	AAAGTTTTAC	CACCAAGCTT	ATCGATTAGT	CCAATTTGTT	6480
AAAGACAGGA	TATCAGTGGT	CCAGGCTCTA	GTTTGTACTC	AACAATATCA	CCAGCTGAAG	6540
CCTATAGAGT	ACGAGCCATA	GATAAAATAA	AAGATTTTAT	TTAGTCTCCA	GAAAAAGGGG	6600
GGAATGAAAG	ACCCACCTG	TAGGTTTGGC	AAGCTAGCTT	AAGTAACGCC	ATTTTGTCAAG	6660
GCATGGAAAA	ATACATAACT	GAGAATAGAG	AAGTTCAGAT	CAAGGTCAGG	AACAGATGGA	6720
ACAGTCGAGA	ACTTGTTTAT	TGCAGCTTAT	AATGGTTACA	AATAAAGCAA	TAGCATCACA	6780
AATTTTACAA	ATAAAGCATT	TTTTTCACTG	CATTCTAGTT	GTGGTTTGTC	CAAACCTCATC	6840
AATGTATCTT	ATCATGTCTG	GATCCCCAGG	AAGCTCCTCT	GTGTCCTCAT	AAACCCTAAC	6900
CTCCTCTACT	TGAGAGGACA	TTCCAATCAT	AGGCTGCCCA	TCCACCCTCT	GTGTCCTCCT	6960
GTTAATTAGG	TCACTTAACA	AAAAGGAAAT	TGGGTAGGGG	TTTTTCACAG	ACCGCTTTCT	7020
AAGGGTAATT	TTAAAATATC	TGGGAAGTCC	CTTCCACTGC	TGTGTTCCAG	AAGTGTGGT	7080
AAACAGCCCA	CAAATGTCAA	CAGCAGAAAC	ATACAAGCTG	TCAGCTTTGC	ACAAGGGCCC	7140
AACACCCTGC	TCATCAAGAA	GCACTGTGGT	TGCTGTGTTA	GTAATGTGCA	AAACAGGAGG	7200
CACATTTTCC	CCACCTGTGT	AGGTTCCAAA	ATATCTAGTG	TTTTCATTTT	TACTTGGATC	7260
AGGAACCCAG	CACTCCACTG	GATAAGCATT	ATCCTTATCC	AAAACAGCCT	TGTGGTCAGT	7320
GTTTCATCTG	TGACTGTCAA	CTGTAGCATT	TTTTGGGGTT	ACAGTTTGAG	CAGGATATTT	7380
GGTCCTGTAG	TTTGCTAACA	CACCCGTGAG	CTCCAAAGGT	TCCCAACCAA	CAGCAAAAAA	7440
ATGAAAATTT	GACCCCTGAA	TGGGTTTTCC	AGCACCATTT	TCATGAGTTT	TTTGTGTCCC	7500
TGAATGCAAG	TTTAACATAG	CAGTTACCCC	AATAACCTCA	GTTTTAACAG	TAACAGCTTC	7560
CCACATCAAA	ATATTTCCAC	AGGTAAAGTC	CTCATTTAAA	TTAGGCAAAG	GAATTC	7616

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Figure 7. hCMV+intron Sequence

AGATCTCCCCG	ATCCCCCTATG	GTCGACTCTC	AGTACAATCT	GCTCTGATGC	CGCATAGTTA	60
AGCCAGTATC	TGCTCCCTGC	TTGTGTGTTG	GAGGTCGCTG	AGTAGTGCGC	GAGCAAAATT	120
TAAGCTACAA	CAAGGCAAGG	CTTGACCGAC	AATTGCATGA	AGAATCTGCT	TAGGGTTAGG	180
CGTTTTGCGC	TGCTTCGCGA	TGTACGGGCC	AGATATACGC	GTTGACATTG	ATTATTGACT	240
AGTTATTAAT	AGTAATCAAT	TACGGGGTCA	TTAGTTCATA	GCCCATATAT	GGAGTTCGCG	300
GTTACATAAC	TTACGGTAAA	TGGCCCCGCT	GGCTGACCGC	CCAACGACCC	CCGCCCATTG	360
ACGTCAATAA	TGACGTATGT	TCCCATAGTA	ACGCCAATAG	GGACTTTCCA	TTGACGTCAA	420
TGGGTGGACT	ATTTACGGTA	AACTGCCCCAC	TTGGCAGTAC	ATCAAGTGTA	TCATATGCCA	480
AGTACGCCCC	CTATTGACGT	CAATGACGGT	AAATGGCCCC	CCTGGCATT	TGCCCAGTAC	540
ATGACCTTAT	GGGACTTTCC	TACTTGGCAG	TACATCTACG	TATTAGTCAT	CGCTATTACC	600
ATGGTGATGC	GGTTTTGGCA	GTACATCAAT	GGGCGTGGAT	AGCGGTTTGA	CTCACGGGGA	660
TTTCCAAGTC	TCCACCCCAT	TGACGTCAAT	GGGAGTTTGT	TTTGGCACCA	AAATCAACGG	720
GACTTTCCAA	AATGTGCTAA	CAACTCCGCC	CCATTGACGC	AAATGGGCGG	TAGGCGTGTA	780
CGGTGGGAGG	TCTATATAAG	CAGAGCTCTC	TGGCTAACTA	GAGAACCCAC	TGCTTAACTG	840
GCTTATCGAA	ATGTCGACTG	AGAACTTCAG	GGTGAGTTTG	GGGACCCCTG	ATTGTTCTTT	900
CTTTTTCGCT	ATTGTAAAAT	TCATGTTATA	TGGAGGGGGC	AAAGTTTTC	GGGTGTTGTT	960
TAGAATGGGA	AGATGTCCCT	TGTATCACC	TGGACCTCA	TGATAATTTT	GTTTCTTTCA	1020
CTTTCTACTC	TGTTGACAAC	CATTGTCTCC	TCTTATTTTC	TTTTCATTTT	CTGTAACTTT	1080
TTCGTTAAAC	TTTAGCTTGC	ATTTGTAACG	AATTTTTTAA	TTCACTTTTG	TTTATTTGTC	1140
AGATTGTAAG	TACTTTCTCT	AATCACTTTT	TTTTCAAGGC	AATCAGGGTA	TATTATATTG	1200
TACTTCAGCA	CAGTTTTAGA	GAACAATTGT	TATAATTAAA	TGATAAGGTA	GAATATTTCT	1260
GCATATAAAT	TCTGGCTGGC	GTGAAATAT	TCTTATTGGT	AGAAACAAC	ACATCCTGGT	1320
CATCATCCTG	CCTTTCTCTT	TATGGTTACA	ATGATATACA	CTGTTTGAGA	TGAGGATAAA	1380
ATACTCTGAG	TCCAAACCGG	GCCCCCTG	TAACCATGTT	CATGCCTTCT	TCTTTTTCTT	1440
ACAGCTCCTG	GGCAACGTGC	TGGTTGTGTG	GTCTGTCTAT	CATTTTGCCA	AGAATTGGCC	1500
GCAAGCTTCT	GCAGCATCGT	TCTGTGTTGT	CTCTGTCTGA	CTGTGTTTCT	GTATTTGCTT	1560
GAGAATATGG	GCCAGACTGT	TACCACTCCC	TAAAGTTTGA	CCTTAGGTCA	CTGGAAAGAT	1620
GTCGAGCGGA	TGCTCACAAC	CCAGTCGGTA	GATGTCAAGA	AGAGACGTTG	GGTTACCTTC	1680
TGCTCTGCAG	AATGGCCAAC	CTTTAACGTC	GGATGGCCGC	GAGACGGCAC	CTTTAACCGA	1740
GACCTCATCA	CCCAGGTTAA	GATCAAGTTC	TTTTCACTTG	GCCCGCATGG	ACACCCAGAC	1800
CAGGTCCCCT	ACATCGTGAC	CTGGGAAGCC	TTGGCTTTTG	ACCCCCCTCC	CTGGGCTAAG	1860
CCCTTTGTAC	ACCCTAAGCC	TCCGCCTCCT	CTTCCTCCAT	CCGCCCCGTC	TCTCCCCCTT	1920
GAACCTCCTC	GTTGACCCCC	GCCTCGATCC	TCCCTTTATC	CAGCCCTCAC	TCCTTCTCTA	1980
GGCGCCAAAC	CTAAACCTCA	AGTTCTTTCT	GACAGTGGGG	GGCCGCTCAT	CGACCTACTT	2040
ACAGAAGACC	CCCCGCCTTA	TAGGGACCCA	AGACCAACCC	CTTCCGACAG	GGACGGAAAT	2100
GGTGGAGAAG	CGACCCCTGC	GGGAGAGGCA	CCGGACCCCT	CCCCAATGGC	ATCTCGCCTA	2160
CGTGGGAGAC	GGGAGCCCCC	TGTGGCCGAC	TCCACTACCT	CGCAGGCATT	CCCCCTCCGC	2220
GCAGGAGGAA	ACGGACAGCT	TCAATACTGG	CCGTTCTCCT	CTTCTGACCT	TTACAACCTG	2280
AAAAATAATA	ACCCTTCTTT	TTCTGAAGAT	CCAGGTAAAC	TGACAGCTCT	GATCGAGTCT	2340
GTTCTCATCA	CCCATCAGCC	ACCTGAGGAC	GACTGTACAG	AGCTGTTGGG	GACTCTGCTG	2400
ACCGGAGAAG	AAAAACAACG	GGTGCTCTTA	GAGGCTAGAA	AGGCGGTGCG	GGGCGATGAT	2460
GGGCGCCCCA	CTCAACTGCC	CAATGAAGTC	GATGCCGCTT	TTCCCTCGA	GCGCCAGAC	2520
TGGGATTACA	CCACCCAGGC	AGGTAGGAAC	CACCTAGTCC	ACTATCGCCA	GTTGCTCCTA	2580
GCGGGTCTCC	AAAACGCGGG	CAGAACCCCC	ACCAATTTGG	CCAAGGTAAA	AGGAATAACA	2640
CAAGGGCCCA	ATGAGTCTCC	CTCGGCCTTC	CTAGAGAGAC	TTAAGGAAGC	CTATCGCAGG	2700
TACACTCCTT	ATGACCCTGA	GGACCCAGGG	CAAGAACTA	ATGTGTCTAT	GTCTTTTATT	2760
TGGCAGTCTG	CCCCAGACAT	TGGGAGAAAG	TTAGAGAGGT	TAGAAGATTT	AAAAAACAAG	2820
ACGCTTGGAG	ATTTGGTTAG	AGAGGCAGAA	AAGATCTTTA	ATAAACGAGA	AACCCCGGAA	2880
GAAAGAGAGG	AACGTATCAG	GAGAGAAACA	GAGGAAAAAG	AAGAACGCCG	TAGGACAGAG	2940
GATGAGCAGA	AAGAGAAAGA	AAGAGATCGT	AGGAGACATA	GAGAGATGAG	CAAGCTATTG	3000
GCCACTGTGC	TTAGTGAGCA	GAAACAGGAT	AGACAGGGAG	GAGAACGAAG	GAGGTCCCAA	3060
CTCGATCGCG	ACCACTGTGC	CTACTGCAAA	GAAAAGGGGC	ACTGGGCTAA	AGATTGTCCC	3120
AAGAAACCC	GAGGACCTCG	GGGACCAAGA	CCCCAGACCT	CCCTCCTGAC	CCTAGATGAC	3180
TAGGGAGGTC	AGGGTCAGGA	GCCCCCCCC	GAACCCAGGA	TAACCCCTCA	AGTCGGGGGG	3240
CAACCCGTCA	CCTTCCTGGT	AGATACTGGG	GCCCAACACT	CCGTGCTGAC	CCAAAATCCT	3300
GGACCCCTAA	GTGATAAGTC	TGCCTGGGTC	CAAGGGGCTA	CTGGAGGAAA	GCGGTATCGC	3360
TGGACCACGG	ATCGCAAAGT	ACATCTAGCT	ACCGGTAAGG	TCACCCACTC	TTTCTCTCAT	3420
GTACCAGACT	GTCCTATCC	TCTGTTAGGA	AGAGATTTGC	TGACTAACT	AAAAGCCCCA	3480
ATCCACTTTG	AGGGATCAGG	AGCTCAGGTT	ATGGGACCAA	TGGGGCAGCC	CCTGCAAGTG	3540
TTGACCCTAA	ATATAGAAGA	TGAGCATCGG	CTACATGAGA	CCTCAAAAGA	GCCAGATGTT	3600
TCTCTAGGGT	CCACATGGCT	GTCTGATTTT	CCTCAGGCCT	GGGCGGAAAC	CGGGGGCATG	3660
GGACTGGCAG	TTCGCCAAGC	TCCTCTGATC	ATACCTCTGA	AAGCAACCTC	TACCCCGGTG	3720
TCCATAAAAC	AATACCCCAT	GTCAACAAG	GCCAGACTGG	GGATCAAGCC	CCACATACAG	3780
AGACTGTTGG	ACCAGGGAA	ACTGGTACCC	TGCCAGTCCC	CCTGGAACAC	GCCCCGTCTA	3840
CCCGTTAAGA	AACCAGGGAC	TAATGATTAT	AGGCCTGTCC	AGGATCTGAG	AGAAGTCAAC	3900
AAGCGGGTGG	AAGACATCCA	CCCCACCGTG	CCCAACCCCT	ACAACCTCTT	GAGCGGGCTC	3960
CCACCGTCCC	ACCAGTGGTA	CACTGTGCTT	GATTTAAAGG	ATGCCTTTTT	CTGCCTGAGA	4020
CTCCACCCCA	CCAGTCAGCC	TCTCTTCGCC	TTTGAGTGGA	GAGATCCAGA	GATGGGAATC	4080

Figure 7. hCMV+intron Sequence

TCAGGACAAT	TGACCTGGAC	CAGACTCCCA	CAGGGTTTCA	AAAACAGTCC	CACCCTGTTT	4140
GATGAGGCAC	TGCACAGAGA	CCTAGCAGAC	TTCCGGATCC	AGCACCCAGA	CTTGATCCTG	4200
CTACAGTACG	TGGATGACTT	ACTGCTGGCC	GCCACTTCTG	AGCTAGACTG	CCAACAAGGT	4260
ACTCGGGCCC	TGTTACAAAC	CCTAGGGAAC	CTCGGGTATC	GGGCCTCGGC	CAAGAAAGCC	4320
CAAATTTGCC	AGAAACAGGT	CAAGTATCTG	GGGTATCTTC	TAAAAGAGGG	TCAGAGATGG	4380
CTGACTGAGG	CCAGAAAAGA	GACTGTGATG	GGGCAGCCTA	CTCCGAAGAC	CCCTCGACAA	4440
CTAAGGGAGT	TCCTAGGGAC	GGCAGGCTTC	TGTCGCCTCT	GGATCCCTGG	GTTTGCAGAA	4500
ATGGCAGCCC	CCTTGTACCC	TCTCACCAAA	ACGGGGACTC	TGTTTAATTG	GGGCCCAGAC	4560
CAACAAAAGG	CCTATCAAGA	AATCAAGCAA	GCTCTTCTAA	CTGCCCCAGC	CCTGGGGTTG	4620
CCAGATTTGA	CTAAGCCCTT	TGAACTCTTT	GTCGACGAGA	AGCAGGGCTA	CGCCAAAGGT	4680
GTCCTAACGC	AAAAACTGGG	ACCTTGGCGT	CGGCCGGTGG	CCTACCTGTC	CAAAAAGCTA	4740
GACCCAGTAG	CAGCTGGGTG	GCCCCCTTGC	CTACGGATGG	TAGCAGCCAT	TGCCGTACTG	4800
ACAAAGGATG	CAGGCAAGCT	AACCATGGGA	CAGCCACTAG	TCATTCTGGC	CCCCCATGCA	4860
GTAGAGGCAC	TAGTCAAACA	ACCCCCCGAC	CGCTGGCTTT	CCAACGCCCG	GATGACTCAC	4920
TATCAGGCCT	TGCTTTTGGG	CACGGACCGG	GTCCAGTTCG	GACCGGTGGT	AGCCCTGAAC	4980
CCGGCTACGC	TGCTCCCACT	GCCTGAGGAA	GGGCTGCAAC	ACAACTGCCT	TGATATCCTG	5040
GCCGAAGCCC	ACGGAACCCG	ACCCGACCTA	ACGGACCAGC	CGCTCCCAGA	CGCCGACCAC	5100
ACCTGGTACA	CGGATGGAAG	CAGTCTCTTA	CAAGAGGGAC	AGCGTAAGGC	GGGAGCTGCG	5160
GTGACCACCG	AGACCGAGGT	AATCTGGGCT	AAAGCCCTGC	CAGCCGGGAC	ATCCGCTCAG	5220
CGGGCTGAAC	TGATAGCACT	CACCCAGGCC	CTAAAGATGG	CAGAAGGTAA	GAAGCTAAAT	5280
GTTTATACTG	ATAGCCGTTA	TGCTTTTGCT	ACTGCCATA	TCCATGGAGA	AATATACAGA	5340
AGGCGTGGGT	TGCTCACATC	AGAAGGCAAA	GAGATCAAAA	ATAAAGACGA	GATCTTGGCC	5400
CTACTAAAAG	CCCTCTTTCT	GCCCCAAAAG	CTTAGCATAA	TCCATTGTCC	AGGACATCAA	5460
AAGGGACACA	GCGCCGAGGC	TAGAGGCAAC	CGGATGGCTG	ACCAAGCGGC	CCGAAAGGCA	5520
GCCATCACAG	AGACTCCAGA	CACCTCTACC	CTCCTCATAG	AAAATTCATC	ACCCTACACC	5580
TCAGAACATT	TTCAATTACAC	AGTGAAGGAT	ATAAAGGACC	TAACCAAGTT	GGGGGCCATT	5640
TATGATAAAA	CAAAGAAGTA	TTGGGTCTAC	CAAGGAAAAC	CTGTGATGCC	TGACCAATTT	5700
ACTTTTGAAT	TATTAGACTT	TCTTCATCAG	CTGACTCACC	TCAGCTTCTC	AAAAATGAAG	5760
GCTCTCCTAG	AGAGAAGCCA	CAGTCCCTAC	TACATGCTGA	ACCGGGATCG	AACACTCAAA	5820
AATATCACTG	AGACCTGCAA	AGCTTGTCAC	CAAGTCAACG	CCAGCAAGTC	TGCCGTAAAA	5880
CAGGGAACCTA	GGGTCCGCGG	GCATCGGCCC	GGCACTCATT	GGGAGATCGA	TTTCCCGAG	5940
ATAAAGCCCG	GATTGTATGG	CTATAAATAT	CTTCTAGTTT	TTATAGATAC	TTTTTCTGGC	6000
TGGATAGAAG	CCTTCCCAAC	CAAGAAAGAA	ACCGCCAAGG	TCGTAACCAA	GAAGCTACTA	6060
GAGGAGATCT	TCCCCAGGTT	CGGCATGCCT	CAGGTATTGG	GAAGTACCAA	TGGGCCTGCC	6120
TTCGTCTCCA	AGGTGAGTCA	GACAGTGGCC	GATCTGTTGG	GGATTGATTG	GAAATTACAT	6180
TGTGCATACA	GACCCCAAAG	CTCAGGCCAG	GTAGAAAGAA	TGAATAGAAC	CATCAAGGAG	6240
ACTTTAACTA	AATTAACGCT	TGCAACTGGC	TCTAGAGACT	GGGTGCTCCT	ACTCCCCCTA	6300
GCCCTGTACC	GAGCCCGCAA	CACGCCGGGC	CCCCATGGCC	TCACCCCAT	TGAGATCTTA	6360
TATGGGGCAC	CCCCGCCCCCT	TGTAAACTTC	CCTGACCCTG	ACATGACAAG	AGTTACTAAC	6420
AGCCCTCTCT	TCCAAGCTCA	CTTACAGGCT	CTCTACTTAG	TCCAGCACGA	AGTCTGGAGA	6480
CCTCTGGCGG	CAGCCTACCA	AGAACAACCTG	GACCGACCGG	TGGTACCTCA	CCCTTACCGA	6540
GTCGGCGACA	CAGTGTGGGT	CCGCCGACAC	CAGACTAAGA	ACCTAGAACC	TCGCTGGAAA	6600
GGACCTTACA	CAGTCCTGCT	GACCACCCCC	ACCGCCCTCA	AAGTAGACGG	CATCGCAGCT	6660
TGGATACACG	CCGCCCACGT	GAAGGCTGCC	GACCCCGGGG	GTGGACCATC	CTCTAGACTG	6720
ACATGGCGCG	TTCAACGCTC	TCAAAACCCC	TTAAAAATAA	GGTTAACCCG	CGAGGCCCCC	6780
TAATCCCCTT	AATTCTTCTG	ATGCTCAGAG	GGGTCAGTAC	TGCTTCGCCC	GGCTCCAGTG	6840
CGGCCCCAGC	GGCCACCATG	AAAACATTTA	ACATTTCTCA	ACAAGATCTA	GAATTAGTAG	6900
AAGTAGCGAC	AGAGAAGATT	ACAATGCTTT	ATGAGGATAA	TAAACATCAT	GTGGGAGCGG	6960
CAATTCGTAC	GAAAAACAGGA	GAAATCATTT	CGGCAGTACA	TATTGAAGCG	TATATAGGAC	7020
GAGTAACTGT	TTGTGCAGAA	GCCATTGCGA	TTGGTAGTGC	AGTTTCGAAT	GGACAAAAGG	7080
ATTTTGACAC	GATTGTAGCT	GTTAGACACC	CTTATTCTGA	CGAAGTAGAT	AGAAGTATTC	7140
GAGTGGTAAG	TCCTTGTGGT	ATGTGTAGGG	AGTTGATTTT	AGACTATGCA	CCAGATTGTT	7200
TGTGTTAAT	AGAAATGAAT	GGCAAGTTAG	TCAAACTAC	GATTGAAGAA	CTCATTCAC	7260
TCAAAATATAC	CCGAAATTAA	AAGTTTTACC	ACCAAGCTTA	TCGAATTC		7308

Figure 8. hCMV+intronkaSD Sequence

1

AGATCTCCCG	ATCCCCCTATG	GTCGACTCTC	AGTACAATCT	GCTCTGATGC	CGCATAGTTA	60
AGCCAGTATC	TGCTCCCTGC	TTGTGTGTTG	GAGGTCGCTG	AGTAGTGCGC	GAGCAAAATT	120
TAAGCTACAA	CAAGGCAAGG	CTTGACCGAC	AATTGCATGA	AGAATCTGCT	TAGGGTTAGG	180
CGTTTTGCGC	TGCTTCGCGA	TGTACGGGCC	AGATATACGC	GTTGACATTG	ATTATTGACT	240
AGTTATTAAT	AGTAATCAAT	TACGGGGTCA	TTAGTTTATA	GCCCATATAT	GGAGTTCGCG	300
GTTACATAAC	TTACGGTAAA	TGGCCCCGCT	GGCTGACCGC	CCAACGACCC	CCGCCCATTG	360
ACGTCAATAA	TGACGTATGT	TCCCATAGTA	ACGCCAATAG	GGACTTTCCA	TTGACGTCAA	420
TGGGTGGACT	ATTTACGGTA	AACTGCCAC	TTGGCAGTAC	ATCAAGTGTA	TCATATGCCA	480
AGTACGCCCC	CTATTGACGT	CAATGACGGT	AAATGGCCCC	CCTGGCATTG	TGCCCAGTAC	540
ATGACCTTAT	GGGACTTTCC	TACTTGGCAG	TACATCTACG	TATTAGTCAT	CGCTATTACC	600
ATGGTGATGC	GGTTTTGGCA	GTACATCAAT	GGGCGTGGAT	AGCGGTTTGA	CTCACGGGGA	660
TTTCCAAGTC	TCCACCCCAT	TGACGTCAAT	GGGAGTTTGT	TTTGGCACCA	AAATCAACGG	720
GACTTTCCAA	AATGTCGTAA	CAACTCCGCC	CCATTGACGC	AAATGGGCGG	TAGGCGTGTA	780
CGGTGGGAGG	TCTATATAAG	CAGAGCTCTC	TGGCTAACTA	GAGAACCAC	TGCTTAACGT	840
GCTTATCGAA	ATGTCGACTG	AGAACTTCAG	GGTGAGTTTG	GGGACCCTTG	ATTGTTCTTT	900
CTTTTTTCGCT	ATTGTAAAAT	TCATGTTATA	TGGAGGGGGC	AAAGTTTTC	GGGTGTTGTT	960
TAGAATGGGA	AGATGTCCCT	TGTATCACCA	TGGACCCTCA	TGATAATTTT	GTTTCTTTCA	1020
CTTTCTACTC	TGTTGACAA	CATTGTCTCC	TCTTATTTTC	TTTTCATTTT	CTGTAACTTT	1080
FTCGTTAAAC	TTTAGCTTGC	ATTTGTAACG	AATTTTTTAA	TTCACTTTTG	TTTATTGTCT	1140
AGATTGTAAG	TACTTTCTCT	AATCACTTTT	TTTTCAAGGC	AATCAGGGTA	TATTATATTG	1200
TACTTCAGCA	CAGTTTTAGA	GAACAATTGT	TATAATTAAA	TGATAAGGTA	GAATATTTCT	1260
GCATATAAAT	TCTGGCTGGC	GTGGAAATAT	TCTTATTGGT	AGAAACAAC	ACATCCTGGT	1320
CATCATCTCG	CTTTCTCTTT	TATGGTTACA	ATGATATACA	CTGTTTGAGA	TGAGGATAAA	1380
ATACTCTGAG	TCCAAACCGG	GCCCCCTTGC	TAAACCATGT	CATGCCCTTCT	TCTTTAACCCT	1440
ACAGCTCCTG	GGCAACGTGC	TGGTTGTTGT	GCTGTCTCAT	CATTTTGGCA	AGAATTGGCC	1500
GCAAGCTTCT	GCAGCATCGT	TCTGTGTTGT	CTCTGTCTGA	CTGTGTTTCT	GTATTTGTCT	1560
GAGAATATGG	GCCAGACTGT	TACCACTCCC	TAAAGTTTGA	CCTTAGGTCA	CTGGAAAGAT	1620
GTCGAGCGGA	TGCTCTGAG	CCAGTCGGTA	GATGTCAAGA	AGAGACGTTG	GGTTACCTTC	1680
TGCTCTGCAG	AATGGCCAAC	CTTTAACGTC	GAGATGGCCG	GAGACGGCAC	CTTTAACCCT	1740
GACCTCATCA	CCCAGGTTAA	GATCAAGGTC	TTTTACCTG	GCCCCGATGG	ACACCCAGAC	1800
CAGGTCCCCCT	ACATCGTGAC	CTGGGAAGCC	TTGGCTTTTG	ACCCCCCTCC	CTGGGTCAAG	1860
CCCTTTGTAC	ACCCTAAGCC	TCCGCCTCCT	CTTCTCTCAT	CCGCCCCGTC	TCTCCCCCTT	1920
GAACCTCCTC	GCCTCGACTC	TCCCTTTATC	TCCCTTTATC	CAGCCCTCAC	TCCTTCTCTA	1980
GGCGCCAAAC	CTAAACCTCA	AGTTCTTTCT	GACAGTGGGG	GGCCGCTCAT	CGACCTACTT	2040
ACAGAAGACC	CCCCGCCTTA	TAGGGACCCA	AGACCACCCC	CTTCCGACAG	GGACGGAAAT	2100
GGTGGAGAAG	CGACCCCTGC	GGGAGAGGCA	CCGGACCCCT	CCCCAATGGC	ATCTCGCCTA	2160
CGTGGGAGAG	GGGAGCCCCC	TGTGGCCGAC	TCCACTACCT	CGCAGGCATT	CCCCCTCCCG	2220
GCAGGAGGAA	ACGGAGAGCT	TCAATACTGG	CCGTTCTCCT	CTTCTGACCT	TTACAACCTG	2280
AAAAATAATA	ACCCTTCTTT	TTCTGAAGAT	CCAGGTAAAC	TGACAGCTCT	GATCGAGTCT	2340
GTTCTCATCA	CCCATCAGCC	EACCTGGGAC	GACTGTCAGC	AGCTGTTGGG	GACTCTGCTG	2400
ACCGGAGAAG	AAAAACAACG	GGTGCTCTTA	GAGGCTAGAA	AGGCGGTGCG	GGGCGATGAT	2460
GGGCGCCCCA	CTCAACTGCC	CAATGAAGTC	GATGCCGCTT	TTCCCCCTCG	GCGCCAGAC	2520
TGGGATTACA	CCACCTAGGC	AGGACGCAAC	CACCTAGTCC	ACTATCGCCA	AGTGATCCTA	2580
GCGGGTCTCC	AAAACGCGGG	CAGAAGCCCC	ACCAATTTGG	CCAAGGTAAA	AGGAATAACA	2640
CAAGGGCCCCA	ATGAGTCTCC	CTCGGCCTTC	CTAGAGAGAC	TTAAGGAAGC	CTATCGCAGG	2700
TACACTCCTT	ATGACCCTGA	GGACCCAGGG	CAAGAACTA	ATGTGTCTAT	GTCTTTCATT	2760
TGGCAGTCTG	CCCCAGACAT	TGGGAGAAAG	TTAGAGAGGT	TAGAAGATTT	AAAAACAACG	2820
ACGCTTGGAG	ATTTGGTTAG	AGAGGCAGAA	AAGATCTTTA	ATAAACGAGA	AACCCCGGAA	2880
GAAAGAGAGG	AACGTATCAG	GAGAGAAACA	GAGGAAAAAG	AAGAACGCGG	TAGGACAGAG	2940
GATGAGCAGA	AAGAGAAAGA	AAGAGATCGT	AGGAGACATA	GAGAGATGAG	CAAGCTATTG	3000
GCCACTGTCT	TTAGTGAGCA	GAAACAGGAT	AGACAGGGAG	GAGAACGAAG	GAGGTCCCAA	3060
CTCGATCGCG	ACCACTGTGC	CTACTGCAAA	GAAAAGGGGC	ACTGGGCTAA	AGATTGTCCC	3120
AAGAAAACCAC	GAGGACCTCG	GGGACCAAGA	CCCCAGACCT	CCCTCCTGAC	CCTAGATGAC	3180
TAGGGAGGTC	AGGGTCAGGA	GCCCCCCCCCT	GAACCCAGGA	TAACCCCTCA	AGTCGGGGGG	3240
CAACCCGTCA	CCTTCTCTGG	AGATACTGGG	GCCCCAACCT	CCGTGCTGAC	CCAAAATCCT	3300
GGACCCCTAA	GTGATAAGTC	TGCCTGGGTC	CAAGGGGCTA	CTGGAGGAAA	GCGGTATCGC	3360
TGGACCAAGG	ATCGCAAAGT	ACATCTAGCT	ACCGGTAAGG	TCACCCACTC	TTTCCCTCCAT	3420
GTACCAGACT	GTCCCTATCC	TCTGTTAGGA	AGAGATTTGC	TGACTAAACT	AAAAGCCCAA	3480
ATCCACTTTG	AGGGATCAGG	AGCTCAGGTT	ATGGGACCAA	TGGGGCAGCC	CCTGCAAGTG	3540
TTGACCCATA	ATATAGAAGA	TGAGCATCGG	CTACATGAGA	CCTCAAAAGA	GCCAGATGTT	3600
TCTCTAGGGT	CCACATGGCT	GTCTGATTTT	CCTCAGGCCT	GGGCGGAAAC	CGGGGGCATG	3660
GGACTGGCAG	TCTCGCAAGC	TCCTCTGATC	ATACCTCTGA	AAGCAACCTC	TACCCCCGCT	3720
TCCATAAAAC	AATACCCCAT	GTCACAAGAA	GCCAGACTGG	GGATCAAGCC	CCACATACAG	3780
AGACTGTTGG	ACCAGGGAAT	ACTGGTACCC	TGCCAGTCCC	CCTGGAACAC	GCCCCTGCTA	3840
CCCGTTAAGA	AACCAGGGAC	TAATGATTAT	AGGCCTGTCT	AGGATCTGAG	AGAAGTCAAC	3900
AAGCGGGTGG	AAGACATGCA	CCCCACCGTG	CCCAACCTCT	ACAACCTCTT	GAGCGGGCTC	3960
CCACCGTCCC	ACCAGTGGTA	CACCTGTGCT	GATTTAAAGG	ATGCCTTTTT	CTGCCTGAGA	4020
CTCCACCCCA	CCAGTCAGCC	TCTCTTCGCC	TTTGAGTGGA	GAGATCCAGA	GATGGGAATC	4080

Figure 8. hCMV+intronkaSD Sequence

TCAGGACAAT	TGACCTGGAC	CAGACTCCCA	CAGGGTTTCA	AAAACAGTCC	CACCCTGTTT	4140
GATGAGGCAC	TGCACAGAGA	CCTAGCAGAC	TTCCGGATCC	AGCACCCAGA	CTTGATCCTG	4200
CTACAGTACG	TGGATGACTT	ACTGCTGGCC	GCCACTTCTG	AGCTAGACTG	CCAACAAGGT	4260
ACTCGGGCCC	TGTTACAAAC	CCTAGGGAAC	CTCGGGTATC	GGGCCTCGGC	CAAGAAAGCC	4320
CAAATTTGCC	AGAAACAGGT	CAAGTATCTG	GGGTATCTTC	TAAAAGAGGG	TCAGAGATGG	4380
CTGACTGAGG	CCAGAAAAGA	GACTGTGATG	GGGCAGCCTA	CTCCGAAGAC	CCCTCGACAA	4440
CTAAGGGGAGT	TCCTAGGGAC	GGCAGGCTTC	TGTCGCCTCT	GGATCCCTGG	GTTTGCAGAA	4500
ATGGCAGCCC	CCTTGTACCC	TCTCACCAAA	ACGGGGACTC	TGTTTAATTG	GGGCCCAGAC	4560
CAACAAAAGG	CCTATCAAGA	AATCAAGCAA	GCTCTTCTAA	CTGCCCCAGC	CCTGGGGTTG	4620
CCAGATTTGA	CTAAGCCCTT	TGAACCTTTT	GTCGACGAGA	AGCAGGGCTA	CGCCAAAGGT	4680
GTCCTAACGC	AAAAACTGGG	ACCTTGCGCT	CGGCCGGTGG	CCTACCTGTC	CAAAAAGCTA	4740
GACCCAGTAG	CAGCTGGGTG	GCCCCCTTGC	CTACGGATGG	TAGCAGCCAT	TGCCGTACTG	4800
ACAAAGGATG	CAGGCAAGCT	AACCATGGGA	CAGCCACTAG	TCATTCTGGC	CCCCCATGCA	4860
GTAGAGGCAC	TAGTCAAACA	ACCCCCGAC	CGCTGGCTTT	CCAACGCCCG	GATGACTCAC	4920
TATCAGGCCT	TGCTTTTGGG	CACGGACCGG	GTCCAGTTCG	GACCGGTGGT	AGCCCTGAAC	4980
CCGGCTACGC	TGCTCCCACT	GCCTGAGGAA	GGGCTGCAAC	ACAACCTGCCT	TGATATCCTG	5040
GCCGAAGCCC	ACGGAACCCG	ACCCGACCTA	ACGGACCAGC	CGCTCCCGAG	CGCCGACCAC	5100
ACCTGGTAA	CGGTCTGAAG	CAGTCTCTTA	CAAGAGGGAC	AGCGTAAGGC	GGGAGCTGCG	5160
GTGACCACCG	AGACCGAGGT	AATCTGGGCT	AAAGCCCTGC	CAGCCGGGAC	ATCCGCTCAG	5220
CGGGCTGAAC	TGATAGCACT	CACCCAGGCC	CTAAAGATGG	CAGAAGGTAA	GAAGCTAAAT	5280
GTTTATACTG	ATAGCCGTTA	TGCTTTTGCT	ACTGCCCAT	TCCATGGAGA	AATATACAGA	5340
AGGCGTGGGT	TGCTCACATC	AGAAGGCAAA	GAGATCAAAA	ATAAAGACGA	GATCTTGGCC	5400
CTACTAAAAG	CCCTCTTTCT	GCCCCAAAAG	CTTAGCATAA	TCCATTGTCC	AGGACATCAA	5460
AAGGGACACA	GCGCCGAGGC	TAGAGGCAAC	CGGATGGCTG	ACCAAGCGGC	CCGAAAGGCA	5520
GCCATCACAG	AGACTCCAGA	CACCTCTACC	CTCCTCATAG	AAAATTCATC	ACCCTACACC	5580
TCAGAACATT	TTCATTACAC	AGTGACTGAT	ATAAAGGACC	TAACCAAGTT	GGGGGCCATT	5640
TATGATAAAA	CAAAGAAGTA	TTGGGTCTAC	CAAGGAAAAC	CTGTGATGCC	TGACCAGTTT	5700
ACTTTTGAAT	TATTAGACTT	TCTTCATCAG	CTGACTCACC	TCAGCTTCTC	AAAAATGAAG	5760
GCTCTCCTAG	AGAGAAGCCA	CAGTCCCTAC	TACATGCTGA	ACCGGGATCG	AACACTCAAA	5820
AATATCACTG	AGACCTGCAA	AGCTTGTGCA	CAAGTCAACG	CCAGCAAGTC	TGCCGTTAAA	5880
CAGGGAACTA	GGGTCCGCGG	GCATCGGCCC	GGCACTCATT	GGGAGATCGA	TTTCACCGAG	5940
ATAAAGCCCG	GATTGTATGG	CTATAAATAT	CTTCTAGTTT	TTATAGATAC	CTTTTCTGGC	6000
TGGATAAAG	CCTTCCCAAC	CAAGAAAGAA	ACCGCAAGG	TCGTAACCAA	GAAAGTACTA	6060
GAGGAGATCT	TCCCCAGGTT	CGGCATGCCT	CAGGTATTGG	GAAGTACAA	TGGGCCTGCC	6120
TTCGTCTCCA	AGGTGAGTCA	GACAGTGGCC	GATCTGTTGG	GGATTGATTG	GAAATTACAT	6180
TGTGCATACA	GACCCCAAAG	CTCAGGCCAG	GTAGAAAGAA	TGAATAGAAC	CATCAAGGAG	6240
ACTTTAACTA	AATTAACGCT	TGCAACTGGC	TCTAGAGACT	GGGTGCTCCT	ACTCCCCCTA	6300
GCCCTGTACC	GAGCCCGCAA	CACGCCGGGC	CCCCATGGCC	TCACCCCAT	TGAGATCTTA	6360
TATGGGGCAC	CCCCGCCCT	TGTAAACTTC	CCTGACCTG	ACATGACAAG	AGTTACTAAC	6420
AGCCCTCTC	TCCAAGCTCA	ETTACAGGCT	CTCTACTTAG	TCCAGCACGA	AGTCTGGAGA	6480
CCTCTGGCGG	CAGCCTACCA	AGAACAACCTG	GACCGACCGG	TGGTACCTCA	CCCTTACCGA	6540
CTCGGCGACA	CAGTGTGGGT	CCGCCGACAC	CAGACTAAGA	ACCTAGAACC	TCGCTGGAAA	6600
GGACCTTACA	CAGTCCTGCT	GACCACCCCC	ACCGCCCTCA	AAGTAGACGG	CATCGCAGCT	6660
TGGATACACG	CCGCCACGCT	GAAGGCTGCC	GACCCCGGGG	GTGGACCATC	CTCTAGACTG	6720
ACATGGCGCG	TTCAACGCTC	TCAAAACCCC	TTAAAAATAA	GGTTAACCCG	CGAGGCCCCC	6780
TAATCCCCTT	AATTCTTCTG	ATGCTCAGAG	GGGTCAGTAC	TGCTTCGCCC	GGCTCCAGTG	6840
CGGCCAGCC	GGCCACCATG	AAAACATTTA	ACATTCTCTA	ACAAGATCTA	GAATTAGTAG	6900
AAGTAGCGAC	AGAGAAGATT	ACAATGCTTT	ATGAGGATAA	TAAACATCAT	GTGGGAGCGG	6960
CAATTCGTAC	GAAAACAGGA	GAAATCATTT	CGGCAGTACA	TATTGAAGCG	TATATAGGAC	7020
GAGTAACTGT	TTGTGCAGAA	GCCATTGCGA	TTGGTAGTGC	AGTTTCGAAT	GGACAAAAGG	7080
ATTTTGACAC	GATTGTAGCT	GTTAGACACC	CTTATTCTGA	CGAAGTAGAT	AGAAGTATTC	7140
GAGTGGTAAG	TCCTTGTTGGT	ATGTGTAGGG	AGTTGATTTT	AGACTATGCA	CCAGATTGTT	7200
TTGTGTTAAT	AGAAATGAAT	GGCAAGTTAG	TCAAAACTAC	GATTGAAGAA	CTCATTCCAC	7260
TCAAATATAC	CCGAAATTAA	AAGTTTTTACC	ACCAAGCTTA	TCGAATTC		7308

Figure 9. FBdelPASAF Sequence

CATATGCGGT	GTGAAATACC	GCACAGATGC	GTAAGGAGAA	AATACCGCAT	CAGGCGCCAT	60
TCGCCATTCA	GGTGTGCGAA	CTGTTGGGAA	GGGCGATCGG	TGCGGGCCTC	TTCGCTATTA	120
CGCCAGCTGG	CGAAAGGGGG	ATGTGCTGCA	AGGCGATTAA	GTTGGGTAAC	GCCAGGGTTT	180
TCCCAGTCAC	GACGTTGTAA	AACGACGGCC	AGTGAATTCC	GATTAGTTCA	ATTGTGTTAA	240
GACAGGATCT	CAGTAGTCCA	GGCTTTAGTC	CTGACTCAAC	AATACCACCA	GCTAAAACCA	300
CTAGAATACG	AGCCACAATA	AATAAAAGAT	TTTATTTAGT	TTCCAGAAAA	AGGGGGGAAT	360
GAAAGACCCC	ACCAAATTGC	TTAGCCTGAT	AGCCGCAGTA	ACGCCATTTT	GCAAGGCATG	420
GAAAAATACC	AAACCAAGAA	TAGAGAAGTT	CAGATCAAGG	GCGGGTACAC	GAAAAACAGT	480
AACGTTGGGC	CAACACAGGAT	ATCTGCGGTG	AGCAGTTTCG	GCCCCGGCCC	GGGGCCAAGA	540
ACAGATGGTC	ACCGCGGTTT	GGCCCCGGCC	CGGGGCCAAG	AACAGATGGT	CCCCAGATAT	600
GGCCCAACCC	TCAGCAGTTT	CTTAAGACCC	ATCAGATGTT	TCCAGGCTCC	CCCAAGGACC	660
TGAAATGACC	CTGTGCCTTA	TTTGAATTAA	CCAATCAGCC	TGCTTCTCGC	TTCTGTTCGC	720
CGCCTTCTGC	TTCCCGAGCT	CTATAAAAGA	GCTCACAACC	CCTCACTCGG	CGCGCCAGTC	780
CTCCGATAGA	CTGAGTCGCC	CGGGTACCCG	TGTATCCAAT	AAATCCTCTT	GCTGTTGCAT	840
CCGACTCGTG	GTCTCGCTGT	TCCTTGGGAG	GGTCTCCTCA	GAGTGATTGA	CTACCCGTCT	900
CGGGGGTCTT	TCATTTGGGG	GCTCGTCCGG	GATCTGGAGA	CCCCTGCCCA	GGGACCACCG	960
ACCCACCACC	GGGAGGTAAG	CTGGCCAAGA	TCTTATATGG	GGCACCCCCG	CCCCCTGTAA	1020
ACTTCCCTGA	CCCTGACATG	ACCAGAGTTA	CTAACAGCCC	CTCTCTCCAA	GCTCACTTAC	1080
AGGCTCTCTA	CTTAGTCCAG	CACGAAGTTT	GGAGACCACT	GGCGGCAGCT	TACCAAGAAC	1140
AACTGGACCG	GCCGGTGGTG	CCTCACCCCT	ACCGGGTCGG	CGACACAGTG	TGGGTCCGCC	1200
GACATCAAAC	CAAGAACCTA	GAACCTCGCT	GGAAAGGACC	TTACACAGTC	CTGCTGACCA	1260
CCCCCACC GC	CCTCAAAGTA	GACGGTATCG	CAGCTTGGAT	ACACGCAGCC	CACGTAAAGG	1320
CGGCCGACAC	CGAGAGTGA	CCATCCTCTG	GACGGACATG	GCGCGTTCAA	CGCTCTCAAA	1380
ACCCCTCAAA	GATAAGATTA	ACCCGTGGAA	GCCCTTAATA	GTCATGGGAG	TCCTGTAGG	1440
AGTAGGGATG	GCAGAGAGCC	CCCATCAGGT	CTTTAATGTA	ACCTGGAGAG	TCACCAACCT	1500
GATGACTGGG	CGTACCGCCA	ATGCCACCTC	CCTCCTGGGA	ACTGTACAAG	ATGCCCTCCC	1560
AAAATTATAT	TTTGATCTAT	GTGATCTGGT	CGGAGAGGAG	TGGGACCCTT	CAGACCAGGA	1620
ACCGTATGTC	GGGTATGGCT	GCAAGTACCC	CGCAGGGAGA	CAGCGGACCC	GGACTTTTGA	1680
CTTTTACGTG	TGCCCTGGGC	ATACCGTAAA	GTCGGGGTGT	GGGGGACCAG	GAGAGGCGTA	1740
CTGTGGTAAA	TGGGGGTGTG	AAACCACCGG	ACAGGCTTAC	TGGAAGCCCA	CATCATCGTG	1800
GGACCTAATC	TCCCTTAAGC	GCGGTAACAC	CCCCTGGGAC	ACGGGATGCT	CTAAAGTTGC	1860
CTGTGGCCCC	TGCTACGACC	TCTCCAAAGT	ATCCAATTCC	TTCCAAGGGG	CTACTCGAGG	1920
GGGCAGATAG	AACCTCTAG	TCCTAGAATT	CACCTGATGCA	GGAAAAAAGG	CTAAGTGGGA	1980
CGGGCCCAAA	TCGTGGGGAC	TGAGACTGTA	CCGGACAGGA	ACAGATCCTA	TTACCATGTT	2040
CTCCCTGACC	CGGCAGGTCC	TTAATGTGGG	ACCCCGAGTC	CCCATAGGGC	CCAACCCAGT	2100
ATTACCCGAC	CAAAGACTCC	CTTCCTCACC	AATAGAGATT	GTACCCGGCTC	CACAGCCACC	2160
TAGCCCCCTC	AATACCAGTT	ACCCCCCTTC	CACTACCAGT	ACACCCTCAA	CCTCCCCCTAC	2220
AAGTCCAAGT	GTCCCAAGC	CACCCCAAGG	AACTGGAGAT	AGACTACTAG	CTCTAGTCAA	2280
AGGAGCCTAT	CAGGCGCTTA	ACCTCACCAA	TCCCGACAAG	ACCCAAGAAT	GTTGGCTGTG	2340
CTTAGTGTCG	GGACCTCCTT	ATTACGAAGG	AGTAGCGGTC	GTGGGCACTT	ATACCAATCA	2400
TTCCACCGCT	CCGGCCAAC	GTACGGCCAC	TTCCCAACAT	AAGCTTACCC	TATCTGAAGT	2460
GACAGGACAG	GGCCTATGCA	TGGGGGACAGT	ACCTAAAACT	CACCAGGCCT	TATGTAACAC	2520
CACCCAAAGC	GCCCGTCCAG	GATCCTACTA	CCTTCGACGA	CCCGCCGGA	CAATGTGGGC	2580
TTGCAGCACT	GGATTGACTC	CCTGCTTGTC	CACCACGGTG	CTCAATCTAA	CCACAGATTA	2640
TTGTGTATTA	GTTGAACTCT	GGCCCAGAGT	AATTTACCAC	TCCCCCGATT	ATATGTATGG	2700
TCAGCTTGAA	CAGCGTACCA	AATATAAAAG	AGAGCCAGTA	TCATTGACCC	TGGCCCTTCT	2760
ACTAGGAGGA	TTAACCATTG	GAGGGATTGC	AGCTGGAATA	GGGACGGGGA	CCACTGCCTT	2820
AATTAAGAAC	CAGCAGTTTG	AGCAGCTTCA	TGCCGCTATC	CAGACAGACC	CTAACGAAGT	2880
CGAAAAGTCA	ATTACCAACC	TAGAAAAGTC	ACTGACCTCG	TTGTCTGAAG	TAGTCCTACA	2940
GAACCGCAGA	GGCCTAGATT	TGCTATTCCCT	AAAGGAGGGA	GGTCTCTGCG	CAGCCCTAAA	3000
AGAAGAATGT	TGTTTTTATG	CAGACCACAC	GGGGCTAGTG	AGAGACAGCA	TGGCCAAATT	3060
AAGAGAAAAG	CTTAATCAGA	GACAAAAACT	ATTTGAGACA	GGCCAAGGAT	GGTTCGAAGG	3120
GCTGTTTAAT	AGATCCCCCT	GGTTTACCAC	CTTAATCTCC	ACCATCATGG	GACCTCTAAT	3180
AGTACTCTTA	CTGATCTTAC	TCTTTGGACC	TTGCATTCTC	AATCGATTAG	TTCAATTTGT	3240
TAAAGACAGG	ATCTCAGTAG	TCCAGGCTTT	AGTCCTGACT	CAACAATACC	ACCAGCTAAA	3300
GCCTATAGAG	TACGAGCCAT	AGGGCGCCTA	GTGTTGACAA	TTAATCATCG	GCATAGTATA	3360
CGGCATAGTA	TAAACGACAT	CACATATAGGA	GGGCCACCAT	GGCCAAGTTG	ACCAGTGCCG	3420
TTCCGGTGCT	CACCGCGCGC	GACGTCGCCG	GACGCGTCEA	GTTCTGGACC	GACCGGCTCG	3480
GGTTCTCCCG	GGACTTCGTG	GAGGACGACT	TCGCCGGTGT	GGTCCGGGAC	GACGTGACCC	3540
TGTTTCATCAG	CGCGGTCCAG	GACCAGGTGG	TGCCGGACAA	CACCCTGGCC	TGGGTGTGGG	3600
TGCGCGGCCT	GGACGAGCTG	TACGCCGAGT	GGTCGGAGGT	CGTGTCCACG	AACTTCCGGG	3660
ACGCCTCCGG	GCGGGCCATG	ACCGAGATCG	CGCAGCAGCC	GTGGGGGCGG	GAGTTNCGCC	3720
TGCGCGACCC	GGCCGGCAAC	TGCGTGCATC	TCGTGGCCGA	GGAGCAGGAC	TGANNNNCGG	3780
ACCGGTCGAC	TTGTAACTT	GTTTATTGCA	GCTTATAATG	GTTACAAATA	AAGCAATAGC	3840
ATCACAATTT	TCACAAATAA	AGCATTTTTT	TCACTGCATT	CTAGTTGTGG	TTTGTCCAAA	3900
CTCATCAATG	TATCTTATCA	TGTCTGGATC	CAGATCTGGG	CCCATGCGGG	CGCGGATCGA	3960
TNNNNACATG	TGAGCAAAAG	GCCAGCAAA	GGCCAGGAAC	CGTAAAAAGG	CCGCGTTGCT	4020
GGCGTTTTTTC	CATAGGCTCC	GCCCCCTGA	CGAGCATCAC	AAAAATCGAC	GCTCAAGTCA	4080



Figure 9. FBdelPASAF Sequence

2

GAGGTGGCGA	AACCCGACAG	GACTATAAAG	ATACCAGGCG	TTTCCCCCTG	GAAGCTCCCT	4140
CGTGCGCTCT	CCTGTTCCGA	CCCTGCCGCT	TACCGGATAC	CTGTCCGCCT	TTCTCCCTTC	4200
GGGAAGCGTG	GCGCTTTCTC	AATGCTCACG	CTGTAGGTAT	CTCAGTTCGG	TGTAGGTCGT	4260
TCGCTCCAAG	CTGGGCTGTG	TGCACGAACC	CCCCGTTCAG	CCCGACCGCT	GCGCCTTATC	4320
CGGTAACAT	CGTCTTGAGT	CCAACCCGGT	AAGACACGAC	TTATCGCCAC	TGGCAGCAGC	4380
CACTGGTAAC	AGGATTAGCA	GAGCGAGGTA	TGTAGGCGGT	GCTACAGAGT	TCTTGAAGTG	4440
GTGGCCTAAC	TACGGCTACA	CTAGAAGGAC	AGTATTGGT	ATCTGCGCTC	TGCTGAAGCC	4500
AGTTACCTTC	GGAAAAAGAG	TTGGTAGCTC	TTGATCCGGC	AAACAAACCA	CCGCTGGTAG	4560
CGGTGGTTTT	TTTGTTTGCA	AGCAGCAGAT	TACGCGCAGA	AAAAAAGGAT	CTCAAGAAGA	4620
TCCTTTGATC	TTTTCTACGG	GGTCTGACGC	TCAGTGGAAC	GAAAACTCAC	GTTAAGGGAT	4680
TTTGGTCATG	AGATTATCAA	AAAGGATCTT	CACCTAGATC	CTTTTAAATT	AAAAATGAAG	4740
TTTTAAATCA	ATCTAAAGTA	TATATGAGTA	AACCTGGTCT	GACAGTTACC	AATGCTTAAT	4800
CAGTGAGGCA	CCTATCTCAG	CGATCTGTCT	ATTTTCGTTCA	TCCATAGTTG	CCTGACTCCC	4860
CGTCGTGTAG	ATAACTACGA	TACGGGAGGG	CTTACCATCT	GGCCCCAGTG	CTGCAATGAT	4920
ACCGCGAGAC	CCACGCTCAC	CGGCTCCAGA	TTTATCAGCA	ATAAACCAGC	CAGCCGGAAG	4980
GGCCGAGCGC	AGAAGTGGTC	CTGCAACTTT	ATCCGCCTCC	ATCCAGTCTA	TTAATTGTTG	5040
CCGGGAAGCT	AGAGTAAGTA	GTTCGCCAGT	TAATAGTTTG	CGCAACGTTG	TTGCCATTGC	5100
TACAGGCATC	GTGGTGTCAC	GCTCGTCGTT	TGGTATGGCT	TCATTTCAGCT	CCGGTTCCCA	5160
ACGATCAAGG	CGAGTTACAT	GATCCCCCAT	GTTGTGCAAA	AAAGCGGTTA	GCTCCTTCGG	5220
TCCTCCGATC	GTTGTCAGAA	GTAAGTTGGC	CGCAGTGTTA	TCACTCATGG	TTATGGCAGC	5280
ACTGCATAAT	TCTCTTACTG	TCATGCCATC	CGTAAGATGC	TTTTCTGTGA	CTGGTGAGTA	5340
CTCAACCAAG	TCATTCTGAG	AATAGTGTAT	GCGGCGAACG	AGTTGCTCTT	GCCCGGCGTC	5400
AATACGGGAT	AATACCGCGC	CACATAGCAG	AACTTTAAAA	GTGCTCATCA	TTGGAAAACG	5460
TTCTTCGGGG	CGAAAACTCT	CAAGGATCTT	ACCGCTGTTG	AGATCCAGTT	CGATGTAACC	5520
CACTCGTGCA	CCCAACTGAT	CTTCAGCATC	TTTTACTTTC	ACCAGCGTTT	CTGGGTGAGC	5580
AAAAACAGGA	AGGCAAAATG	CCGCAAAAAA	GGGAATAAGG	GCGACACGGA	AATGTTGAAT	5640
ACTCATACTC	TTCCTTTTTT	AATATTATTG	AAGCATTTAT	CAGGGTTATT	GTCTCATGAG	5700
CGGATACATA	TTTGAATGTA	TTTAGAAAAA	TAAACAAATA	GGGGTTCCGC	GCACATTTCC	5760
CCGAAAAGTG	CCACCTGACG	TCTAAGAAAC	CATTATTATC	ATGACATTAA	CCTATAAAAA	5820
TAGGCGTATC	ACGAGGCCCT	TTCGTCTCGC	GCGTTTCGGT	GATGACGGTG	AAAACCTCTG	5880
ACACATGCAG	CTCCCGGAGA	CGGTCACAGC	TTGTCTGTAA	GCGGATGCCG	GGAGCAGACA	5940
AGCCCGTCAG	GGCGCGTCAG	CGGGTGTTGG	CGGGTGTCGG	GGCTGGCTTA	ACTATGCGGC	6000
ATCAGAGCAG	ATTGTACTGA	GAGTGCAC				6028

Figure 10. FBdelPMOSAF Sequence

1

CATATGCGGT	GTGAAATACC	GCACAGATGC	GTAAGGAGAA	AATACCGCAT	CAGGCGCCAT	60
TCGCCATTCA	GGCTGCGCAA	CTGTTGGGAA	GGGCGATCGG	TGCGGGCCTC	TTCGCTATTA	120
CGCCAGCTGG	CGAAAGGGGG	ATGTGCTGCA	AGGCGATTAA	GTTGGGTAAC	GCCAGGGTTT	180
TCCCAGTCAC	GACGTTGTAA	AACGACGGCC	AGTGAATTCC	GATTAGTTCA	ATTTGTTAAA	240
GACAGGATCT	CAGTAGTCCA	GGCTTTAGTC	CTGACTCAAC	AATACCACCA	GCTAAAACCA	300
CTAGAATACG	AGCCACAATA	AATAAAAGAT	TTTATTTAGT	TTCCAGAAAA	AGGGGGGAAT	360
GAAAGACCCC	ACCAAATTGC	TTAGCCTGAT	AGCCGCGATA	ACGCCATTTT	GCAAAGGCATG	420
GAAAAATACC	AAACCAAGAA	TAGAGAAGTT	CAGATCAAGG	GCGGGTACAC	GAAAAACAGT	480
AACGTTGGGC	CAAACAGGAT	ATCTGCGGTG	AGCAGTTTCG	GCCCCGGCCC	GGGGCCAAGA	540
ACAGATGGTC	ACCGCGGTTT	GGCCCCGGCC	CGGGGCCAAG	AACAGATGGT	CCCCAGATAT	600
GGCCCAACCC	TCAGCAGTTT	CTTAAGACCC	ATCAGATGTT	TCCAGGCTCC	CCCAAGGACC	660
TGAAATGACC	TTTGACCTTA	CTTGAATTAA	CCAATCAGCC	TGCTTCTCGC	TTCTGTTTCG	720
GCGCTTCTGC	TTCCCGAGCT	CTATAAAAGA	GCTCACAACC	CCTCACTCGG	CGCGCCAGTC	780
CTCCGATAGA	CTGAGTCGCC	CGGGTACCCG	TGTATCCAAT	AAATCCTCTT	GCTGTTGCAT	840
CCGACTCGTG	GTCTCGCTGT	TCCTTGGGAG	GGTCTCCTCA	GAGTGATTGA	CTACCCGTCT	900
CGGGGGTCTT	TCATTTGGGG	GCTCGTCCGG	GATCTGGAGA	CCCCTGCCCC	GGGACCACCG	960
ACCCACCACC	GGGAGGTAAG	CTGGCCAAGA	TCTTATATGG	GGCACCCCGG	CCCCTTGTAA	1020
ACTTCCCTGA	CCCTGACATG	ACAAGAGTTA	CTAACAGCCC	CTCTCTCCAA	GCTCACTTAC	1080
AGGCTCTCTA	CTTAGTCCAG	CACGAAGTCT	GGAGACCTCT	GGCGGCAGCC	TACCAAGAAC	1140
AACTGGACCG	ACCGGTGGTA	CCTCACCCCT	ACCGAGTCGG	CGACACAGTG	TGGGTCCGCC	1200
GACACCAGAC	TAAGAACCTA	GAACCTCGCT	GGAAAGGACC	TTACACAGTC	CTGCTGACCA	1260
CCCCACCCG	GCTCAAAGTA	GACGGCATCG	CAGCTTGGAT	ACACGCCGCC	CACGTGAAGG	1320
CTGCCGACCC	CGGGGGTGGG	CCATCCTCTA	GACTGACATG	GCGCGTTCAA	CGCTCTCAAA	1380
ACCCCTTAAA	AATAAGGTTA	ACCCGCGAGG	CCCCCTAATC	CCCTTAATTC	TTCTGATGCT	1440
CAGAGGGGTC	AGTACTGCTT	CGCCCGGCTC	CAGTCCTCAT	CAAGTCTATA	ATATCACCTG	1500
GGAGGTAACC	AATGGAGATC	GGGAGACGGT	ATGGGCAACT	TCTGGCAACC	ACCCTCTGTG	1560
GACCTGGTGG	CCTGACCTTA	CCCCAGATTT	ATGTATGTTA	GCCCACCATG	GACCATCTTA	1620
TTGGGGGGCTA	GAATATCAAT	CCCCTTTTTC	TTCTCCCCCG	GGGCCCCCTT	GTTGCTCAGG	1680
GGGCAGCAGC	CCAGGCTGTT	CCAGAGACTG	CGAAGAACCT	TTAACCTCCC	TCACCCCTCG	1740
GTGCAACACT	GCCTGGAACA	GACTCAAGCT	AGACCAGACA	ACTCATAAAT	CAAATGAGGG	1800
ATTTTATGTT	TGCCCCGGGG	CCCACCGCCC	CCGAGAATCC	AAGTCATGTG	GGGGTCCAGA	1860
CTCCTTCTAC	TGTGCTTATT	GGGGCTGTGA	GACAACCGGT	AGAGCTTACT	GGAAGCCCTC	1920
CTCATCATGG	GATTTTCATCA	CAGTAAACAA	CAATCTCACC	TCTGACCAGG	CTGTCCAGGT	1980
ATGCAAAGAT	AATAAGTGGT	GCAACCCCTT	AGTTATTCCG	TTTACAGACG	CCGGGAGACG	2040
GGTFACTTCC	TGGACCACAG	GACATTACTG	GGGCTTACGT	TTGTATGTCT	CCGGACAAGA	2100
TCCAGGGCTT	ACATTTGGGA	TCCGACTCAG	ATACCAAAAT	CTAGGACCCC	GCGTCCCAAT	2160
AGGGCCAAAC	CCCGTTCTGG	CAGACCAACA	GCCACTCTCC	AAGCCCAAAC	CTGTTAGATC	2220
GCCTTCAGTC	ACCAAACCAC	CCAGTGGGAC	TCCTCTCTCC	CCTACCCAAC	TTCCACCGGC	2280
GGGAACGGAA	AATAGGCTGC	TAAACTTAGT	AGACGGAGCC	TACCAAGCCC	TCAACCTCAC	2340
CAGTCCTGAC	AAAACCCAAG	AGTGCTGGTT	GTGTCTAGTA	GCGGGACCCC	CCTACTACGA	2400
AGGGGTTGCC	GAGAGGCTGT	CTCTCTCCAA	CCATACCTCT	GCTCCAGCCA	ACTGCTCCGT	2460
GGCCTCCCAA	CACAAGTTGA	CCCTGTCCGA	AGTGACCGGA	CAGGGACTCT	GCATGAGAGC	2520
AGTTCCCAAA	ACACATCAGG	CCCTATGTAA	TACCACCCAG	ACAAGCAGTC	GAGGGTCTTA	2580
TTATCTAGTT	GCCCCACAG	GTACCATGTG	GGCTTGTAAG	ACCGGGCTTA	CTCCATGCAT	2640
CTCCACCACC	ATACTGAACC	TTACCACTGA	TTATTGTGTT	CTTGTCGAAC	TCTGGCCAAG	2700
AGTCACCTAT	ACTTCCCCCA	GCTATGTTTA	CGGCCTGTTT	GAGAGATCCA	ACCGACACAA	2760
AAGAGAACCG	GTGTCGTTAA	CCCTGGCCCT	ATTATTGGGT	GGACTAACCA	TGGGGGGAAT	2820
TGCCGCTGGA	ATAGGAACAG	GGACTACTGC	TCTAATGGCC	ACTCAGCAAT	TCCAGCAGCT	2880
CCAAGCCGCA	GTACAGGATG	ATCTCAGGGA	GGTTGAAAAA	TCAATCTCTA	ACCTAGAAAA	2940
GTCTCTCACT	TCCCTGTCTG	AAGTTGTCTT	ACAGAATCGA	AGGGGCCTAG	ACTTGTATT	3000
TCTAAAAGAA	GGAGGGCTGT	GTGCTGCTCT	AAAAGAAGAA	TGTTGCTTCT	ATGCGGACCA	3060
CACAGGACTA	GTGAGAGACA	GCATGGCCAA	ATTGAGAGAG	AGGCTTAATC	AGAGACAGAA	3120
ACTGTTTGAG	TCAACTCAAG	GATGGTTTGA	GGGACTGTTT	AACAGATCCC	CTTGGTTTAC	3180
CACCTTGATA	TCTACCATTA	TGGGACCCCT	CATTGTACTC	CTAATGATTT	TGCTCTTCGG	3240
ACCCTGCATT	CTTAATCGAT	TAGTTCAATT	TGTTAAAGAC	AGGATCTCAG	TAGTCCAGGC	3300
TTTAGTCCTG	ACTCAACAAT	ACCACCAGCT	AAAGCCTATA	GAGTACGAGC	CATAGGGCGC	3360
CTAGTGTTGA	CAATTAATCA	TCGGCATAGT	ATACGGCATA	GTATAATACG	ACTCACTATA	3420
GGAGGGCCAC	CATGGCCAAG	TTGACCAGTG	CCGTTCCGGT	GCTCACCGCG	CGCGACGTCG	3480
CCGGAGCCGT	CGAGTTCTGG	ACCGACCGGC	TCGGGTTCCT	CCGGGACTTC	GTGGAGGACG	3540
ACTTCGCCGG	TGTGGTCCGG	GACGACGTGA	CCCTGTTTCAT	CAGCGCGGTC	CAGGACCAGG	3600
TGGTGCCGGA	CAACACCTGC	GCCTGGGTGT	GGGTGCGCGG	CCTGGACGAG	CTGTACCGCG	3660
AGTGGTCGGA	GGTCGTGTCC	ACGAACCTCC	GGGACGCCCT	CGGGCCGGCC	ATGACCGAGA	3720
TCGGCGAGCA	GCCGTGGGGG	CGGGAGTTCC	CCCTGCGCGA	CCCGCCCGGC	AACTGCGTGC	3780
ACTTCGTGGC	CGAGGAGCAG	GACTGANNNN	CGGACCGGTC	GACTTGTTAA	CTTGTGTTATT	3840
GCAGCTTATA	ATGGTTACAA	ATAAAGCAAT	AGCATCACAA	ATTTACACAA	TAAAGCATTT	3900
TTTTCACTGC	ATTCTAGTTG	TGGTTTGTCC	AAACTCATCA	ATGTATCTTA	TCATGTCTGG	3960
ATCCAGATCT	GGGCCCATGC	GGCCGCGGAT	CGATNNNNAC	ATGTGAGCAA	AAGGCCAGCA	4020
AAAGGCCAGG	AACCGTAAAA	AGGCCGCGTT	GCTGGCGTTT	TTCCATAGGC	TCCGCCCCCC	4080



Figure 10. FBdelPMOSAF Sequence

TGACGAGCAT	CACAAAAATC	GACGCTCAAG	TCAGAGGTGG	CGAAACCCGA	CAGGACTATA	4140
AAGATACCAG	GCGTTTCCCC	CTGGAAGCTC	CCTCGTGCGC	TCTCCTGTTC	CGACCCTGCC	4200
GCTTACCGGA	TACCTGTCCG	CCTTTCTCCC	TTCCGGAAGC	GTGGCGCTTT	CTCAATGCTC	4260
ACGCTGTAGG	TATCTCAGTT	CGGTGTAGGT	CGTTCGCTCC	AAGCTGGGCT	GTGTGCACGA	4320
ACCCCCCGTT	CAGCCCGACC	GCTGCGCCTT	ATCCGGTAAC	TATCGTCTTG	AGTCCAACCC	4380
GGTAAGACAC	GACTTATCGC	CACTGGCAGC	AGCCACTGGT	AACAGGATTA	GCAGAGCGAG	4440
GTATGTAGGC	GGTGCTACAG	AGTTCTTGAA	GTGGTGGCCT	AACTACGGCT	ACACTAGAAG	4500
GACAGTATTT	GGTATCTGCG	CTCTGCTGAA	GCCAGTTACC	TTCCGAAAAA	GAGTTGGTAG	4560
CTCTTGATCC	GGCAAAACAA	CCACCGCTGG	TAGCGGTGGT	TTTTTTGTTT	GCAAGCAGCA	4620
GATTACGCGC	AGAAAAAAG	GATCTCAAGA	AGATCCTTTG	ATCTTTTCTA	CGGGGTCTGA	4680
CGCTCAGTGG	AACGAAAACT	CACGTTAAGG	GATTTTGGTC	ATGAGATTAT	CAAAAAGGAT	4740
CTTCACCTAG	ATCCTTTTAA	ATTAAAAATG	AAGTTTAA	TCAATCTAAA	GTATATATGA	4800
GTAAACTTGG	TCTGACAGTT	ACCAATGCTT	AATCAGTGAG	GCACCTATCT	CAGCGATCTG	4860
TCTATTTTCGT	TCATCCATAG	TTGCCTGACT	CCCCGTCGTG	TAGATAACTA	CGATACGGGA	4920
GGGCTTACCA	TCTGGCCCCA	GTGCTGCAAT	GATACCGCGA	GACCCACGCT	CACCGGCTCC	4980
AGATTTATCA	GCAATAAACC	AGCCAGCCGG	AAGGGCCGAG	CGCAGAAGTG	GTCTTGCAAC	5040
TTTATCCGCC	TCCATCCAGT	CTATTAATTG	TTGCCGGGAA	GCTAGAGTAA	GTAGTTCGCC	5100
AGTTAATAGT	TTGCGCAACG	TTGTTGCCAT	TGCTACAGGC	ATCGTGGTGT	CACGCTCGTC	5160
GTTTGGTATG	GCTTCATTCA	GCTCCGGTTC	CCAACGATCA	AGGCGAGTTA	CATGATCCCC	5220
CATGTTGTGC	AAAAAAGCGG	TTAGCTCCTT	CGGTCCTCCG	ATCGTTGTCA	GAAGTAAGTT	5280
GGCCGCAGTG	TTATCACTCA	TGGTTATGGC	AGCACTGCAT	AATTCTCTTA	CTGTCATGCC	5340
ATCCGTAAGA	TGCTTTTCTG	TGACTGGTGA	GTACTCAACC	AAGTCATTCT	GAGAATAGTG	5400
TATGCGGCGA	CCGAGTTGCT	CTTGCCCCGGC	GTCAATACGG	GATAATACCG	CGCCACATAG	5460
CAGAACTTTA	AAAGTGCTCA	TCATTGGA	ACGTTCTTCG	GGGCGAAAA	TCTCAAGGAT	5520
CTTACCGCTG	TTGAGATCCA	GTTTCGATGTA	ACCCACTCGT	GCACCCA	GATCTTCAGC	5580
ATCTTTTACT	TTCACCAGCG	TTTCTGGGTG	AGCAAAAACA	GGAAGGCA	ATGCCGCA	5640
AAAGGGAATA	AGGGCGACAC	GGAAATGTTG	AATACTCATA	CTCTTCCTTT	TTCAATATTA	5700
TTGAAGCATT	TATCAGGGTT	ATTGTCTCAT	GAGCGGATAC	ATATTTGAAT	GTATTTAGAA	5760
AAATAAACAA	ATAGGGGTTT	CGCGCACATT	TCCCCGAAAA	GTGCCACCTG	ACGTCTAAGA	5820
AACCATTATT	ATCATGACAT	TAACCTATA	AAATAGGCGT	ATCACGAGGC	CCTTTCGTCT	5880
CGCGCGTTTC	GGTGATGACG	GTGAAAACCT	CTGACACATG	CAGCTCCCGG	AGACGGTCAC	5940
AGCTTGCTG	TAAGCGGATG	CCGGGAGCAG	ACAAGCCCGT	CAGGGCGCGT	CAGCGGGTGT	6000
TGGCGGGTGT	CGGGGCTGGC	TTAACTATGC	GGCATCAGAG	CAGATTGTAC	TGAGAGTGCA	6060
C						6061

Figure 11. FBdelPGASAF Sequence

1

CATATGCGGT	GTGAAATACC	GCACAGATGC	GTAAGGAGAA	AATACCGCAT	CAGGCGCCAT	60
TCGCCATTCA	GGCTGCGCAA	CTGTTGGGAA	GGGCGATCGG	TGCGGGCCTC	TTCGCTATTA	120
CGCCAGCTGG	CGAAAGGGGG	ATGTGCTGCA	AGGCGATTAA	GTTGGGTAAC	GCCAGGGTTT	180
TCCCAGTCAC	GACGTTGTAA	AACGACGGCC	AGTGAATTCC	GATTAGTTCA	ATTTGTATAA	240
GACAGGATCT	CAGTAGTCCA	GGCTTTAGTC	CTGACTCAAC	AATACCACCA	GCTAAAACCA	300
CTAGAATACG	AGCCACAATA	AATAAAAGAT	TTTATTTAGT	TTCCAGAAAA	AGGGGGGAAT	360
GAAAGACCCC	ACCAAATTGC	TTAGCCTGAT	AGCCGCAGTA	ACGCCATTTT	GCAAGGCATG	420
GAAAAATACC	AAACCAAGAA	TAGAGAAGTT	CAGATCAAGG	GCGGGTACAC	GAAAACAGCT	480
AACGTTGGGC	CAAACAGGAT	ATCTGCGGTG	AGCAGTTTCG	GCCCCGGCCC	GGGGCCAAGA	540
ACAGATGGTC	ACCGCGGTTT	GGCCCCGGCC	CGGGGCCAAG	AACAGATGGT	CCCCAGATAT	600
GGCCCAACCC	TCAGCAGTTT	CTTAAGACCC	ATCAGATGTT	TCCAGGCTCC	CCCAAGGACC	660
TGAAATGACC	CTGTGCCTTA	TTTGAATTAA	CCAATCAGCC	TGCTTCTCGC	TTCTGTTTCG	720
GCGCTTCTGC	TTCCCGAGCT	CTATAAAAGA	GCTCAACAAC	CCTCACTCGG	CGCGCCAGTC	780
CTCCGATAGA	CTGAGTCGCC	CGGGTACCCG	TGTATCCAAT	AAATCCTCTT	GCTGTTGCAT	840
CCGACTCGTG	GTCTCGCTGT	TCCTTGGGAG	GGTCTCCTCA	GAGTGATTGA	CTACCCGTCT	900
CGGGGGTCTT	TCATTGGGGG	GCTCGTCCGG	GATCTGGAGA	CCCCTGCCCC	GGGACCACCG	960
ACCCACCACC	GGGAGGTAAG	CTGGCCAAGA	TCCCTAAGGT	ACTCGGGTCA	GACAATGGCC	1020
CGGCCTTTGT	TGCTCAGGTA	AGTCAGGGAC	TGGCCACTCA	ACTGGGGATA	AATTGGAAGT	1080
TACATTGTGC	GTATAGACCC	CAGAGCTCAG	GTCAGGTAGA	AAGAATGAAC	AGAACAATTA	1140
AAGAGACCTT	GACCAAATTA	GCCTTAGAGA	CCGGTGGAAA	AGACTGGGTG	ACCCTCCTTC	1200
CCTTAGCGCT	GCTTAGGGCC	AGGAATACCC	CTGGCCGGTT	TGGTTTAACT	CCTTATGAAA	1260
TTCTCTATGG	AGCACCACCC	CCCATTGTG	AGTCTGGAGA	AACTTTGGGT	CCCGATGATA	1320
GATTTCTCCC	TGTCTTATTT	ACTCACTTAA	AGGCTTTAGA	AATTGTAAAG	ACCCAAATCT	1380
GGGACCAGAT	CAAAGAGGTG	TATAAGCCTG	GTACCGTAAC	AATCCCTCAC	CCGTTCCAGG	1440
TCGGGGATCA	AGTGCTTGTC	AGACGCCATC	GACCCAGCAG	CCTTGAGCCT	CGGTGGAAAG	1500
GCCCATACCT	GGTGTGCTG	ACTACCCCGA	CCGCGGTAAA	AGTCGATGGT	ATTGCTGCCT	1560
GGGTCCATGC	TTCTCACCTC	AAACCTGCAC	CACCTTCGGC	ACCAGATGAG	TCCTGGGGAG	1620
TGGAAAAGAC	TGATCATCCT	CTTAAGCTGC	GTATTCGGCG	GCGGCGGGAC	GAGTCTGCAA	1680
AATAAGAACC	CCCACCAGCC	CATGACCCTC	ACTTGGCAGG	TACTGTCCCA	AACTGGAGAC	1740
GTTGTCTGGG	ATACAAAGGC	AGTCCAGCCC	CCTTGGACTT	GGTGGCCAC	ACTTAAACCT	1800
GATGTATGTG	CCTTGCGCGG	TAGTCTTGAG	TCCTGGGATA	TCCCGGGAAC	CGATGTCTCG	1860
TCCTCTAAAC	GAGTCAGACC	TCCGGACTCA	GACTATACTG	CCGCTTATAA	GCAAATCACC	1920
TGGGGAGCCA	TAGGGTGCAG	CTACCCTCGG	GCTAGGACTA	GAATGGCAAG	CTCTACCTTC	1980
TACGTATGTC	CCCGGGATGG	CCGGACCCTT	TCAGAAGCTA	GAAGGTGCGG	GGGGCTAGAA	2040
TCCCTATACT	GTAAAGAATG	GGATTGTGAG	ACCACGGGGA	CCGGTTATTG	GCTATCTAAA	2100
TCCTCAAAAG	ACCCTATAAC	TGTAATAATG	GACCAAAAATA	GCGAATGGAC	TCAAAAATTT	2160
CAACAGTGTC	ACCAGACCGG	CTGGTGTAAC	CCCCCTAAAA	TAGATTTTCA	AGACAAAGGA	2220
AAATTATCCA	AGGACTGGAT	AACGGGAAAA	ACCTGGGGAT	TAAGATTCTA	TGTGTCTGGA	2280
CATCCAGGCG	TACAGTTCAC	CATTTCGCTT	AAAATCACCA	ACATGCCAGC	TGTGGCAGTA	2340
GGTCTTGACC	TCGTCTTGT	GGAACAAGGA	CCTCCTAGAA	CGTCCCTCGC	TCTCCACCT	2400
CCTCTTCCCC	CAAGGAAGC	GCCACCGCCA	TCTCTCCCCG	ACTCTAACTC	CACAGCCCTG	2460
GCGACTAGTG	CACAAACTCC	CACGGTGAGA	AAAACAATTG	TTACCCTAAA	CACCTCCGCT	2520
CCCACCACAG	GCGACAGACT	TTTTGATCTT	GTGCAGGGGG	CCTTCCTAAC	CTTAAATGCT	2580
ACCAACCCAG	GGGCCACTGA	GTCTTGCTGG	CTTTGTTTGG	CCATGGGCCC	CCCTTATTAT	2640
GAAGCAATAG	CCTCATCAGG	AGAGGTCGCG	TACTCCACCG	ACCTTGACCG	GTGCCGCTGG	2700
GGGACCCAA	GAAAGCTCAC	CCTCACTGAG	GTCTCAGGAC	ACGGGTGTG	CATAGGAAAG	2760
GTGCCCTTTA	CCCATCAGCA	TCTCTGCAAT	CAGACCCCTAT	CCATCAATTC	CTCCGGAGAC	2820
CATCAGTATC	TGCTCCCCCT	CAACCATAGC	TGGTGGGCTT	GCAGCACTGG	CCTCACCCCT	2880
TGCCTCTCCA	CCTCAGTTTT	TAATCAGACT	AGAGATTTCT	GTATCCAGGT	CCAGCTGATT	2940
CCTCGCATCT	ATTACTATCC	TGAAGAAGTT	TTGTTACAGG	CCTATGACAA	TTCTCACCCC	3000
AGGACTAAAA	GAGAGGCTGT	CTCACTTACC	CTAGCTGTTT	TACTGGGGTT	GGGAATCACG	3060
GCGGGAATAG	GTACTGGTTC	AACTGCCTTA	ATTAAAGGAC	CTATAGACCT	CCAGCAAGGC	3120
CTGACAAGCC	TCCAGATCGC	CATAGATGCT	GACCTCCGGG	CCCTCCAAGA	CTCAGTCAGC	3180
AAGTTAGAGG	ACTCACTGAC	TTCCCTGTCC	GAGGTAGTGC	TCCAAAATAG	GAGAGGCCTT	3240
GACTTGCTGT	TTCTAAAAGA	AGGTGGCCTC	TGTGCGGGCC	TAAAGGAAGA	GTGCTGTTTT	3300
TACATAGACC	ACTCAGGTGC	AGTACGGGAC	TCCATGAAAA	AACTCAAAGA	AAACTGGAT	3360
AAAAGACAGT	TAGAGCGCCA	GAAAAGCCAA	AACTGGTATG	AAGGATGGTT	CAATAACTCC	3420
CCTTGGTTCA	CTACCCTGCT	ATCAACCATC	GCTGGGCCCC	TATTACTCCT	CCTTCTGTTG	3480
CTCATCCTCG	GGCCATGCAT	CATCAATCGA	TTAGTTCAAT	TTGTTAAAGA	CAGGATCTCA	3540
GTAGTCCAGG	CTTTAGTCTT	GACTCAACAA	TACCACCAGC	TAAAGCCTAT	AGAGTACGAG	3600
CCATAGGGCG	CCTTAGTGTG	ACAATTAATC	ATCGGCATAG	TATACGGCAT	AGTATAATAC	3660
GACTCACTAT	AGGAGGGCCA	CCATGGCCAA	GTTGACCAGT	GCCGTTCGGG	TGCTCACCCG	3720
GCGCGACGTC	GCCGGAGCGG	TCGAGTTCGT	GACCGACCGG	CTCGGGTTCT	CCCGGGACTT	3780
CGTGGAGGAC	GACTTCGCGG	GTGTGGTCCG	GGACGACGTG	ACCCTGTTC	TCAGCGCGGT	3840
CCAGGACCCAG	GAGTGGCCGG	ACAACACCCT	GGCCTGGGTG	TGGGTGCGCG	GCCTGGACGA	3900
GCTGTACGCC	GAGTGGTCCG	AGGTCGTGTC	CACGAACCTC	CGGGACCCCT	CCGGGCCCGG	3960
CATGACCGAG	ATCGGCGAGC	AGCCGTGGGG	GCGGGAGTTC	GCCCTGCGCG	ACCCGGCCCG	4020
CAACTGCGTG	CACTTCGTGG	CCGAGGAGCA	GGACTGANNN	NCGGACCGGT	CGACTTGTTA	4080

Figure 11. FBdelPGASAF Sequence

2

ACTTGTTTAT	TGCAGCTTAT	AATGGTTACA	AATAAAGCAA	TAGCATCACA	AATTTACACAA	4140
ATAAAGCATT	TTTTTCACTG	CATTCTAGTT	GTGGTTTGTC	CAAACTCATC	AATGTATCTT	4200
ATCATGTCTG	GATCCAGATC	TGGGCCCATG	CGGCCGCGGA	TCGATNNNNA	CATGTGAGCA	4260
AAAGGCCAGC	AAAAGGCCAG	GAACCGTAAA	AAGGCCGCGT	TGCTGGCGTT	TTTCCATAGG	4320
CTCCGCCCCC	CTGACGAGCA	TCACAAAAAT	CGACGCTCAA	GTCAGAGGTG	GCGAAACCCG	4380
ACAGGACTAT	AAAGATACCA	GGCGTTTCCC	CCTGGAAGCT	CCCTCGTGCG	CTCTCCTGTT	4440
CCGACCCTGC	CGCTTACCGG	ATACCTGTCC	GCCTTTCTCC	CTTCGGGAAG	CGTGGCGCTT	4500
TCTCAATGCT	CACGCTGTAG	GTATCTCAGT	TCGGTGTAGG	TCGTTGCGTC	CAAGCTGGGC	4560
TGTGTGCACG	AACCCCCCGT	TCAGCCCCGAC	CGCTGCGCCT	TATCCGGTAA	CTATCGTCTT	4620
GAGTCCAACC	CGGTAAGACA	CGACTTATCG	CCACTGGCAG	CAGCCACTGG	TAACAGGATT	4680
AGCAGAGCGA	GGTATGTAGG	CGGTGCTACA	GAGTTCTTGA	AGTGGTGGCC	TAACACGGC	4740
TACACTAGAA	GGACAGTATT	TGGTATCTGC	GCTCTGCTGA	AGCCAGTTAC	CTTCGGAAAA	4800
AGATTGGTA	GCTCTTGATC	CGGCAAAACAA	ACCACCGCTG	GTAGCGGTGG	TTTTTTTGT	4860
TGCAAGCAGC	AGATTACGCG	CAGAAAAAAA	GGATCTCAAG	AAGATCCTTT	GATCTTTTCT	4920
ACGGGGTCTG	ACGCTCAGTG	GAACGAAAAC	TCACGTAAAG	GGATTTTGGT	CATGAGATTA	4980
TCAAAAAGGA	TCTTCACCTA	GATCCTTTTA	AATTAAAAAT	GAAGTTTAA	ATCAATCTAA	5040
AGTATATATG	AGTAAACTTG	GTCTGACAGT	TACCAATGCT	TAATCAGTGA	GGCACCTATC	5100
TCAGCGATCT	GCTTATTTTCG	TTCATCCATA	GTGCGCTGAC	TCCCCGTCGT	GTAGATAACT	5160
ACGATACGGG	AGGGCTTACC	ATCTGGCCCC	AGTGCTGCAA	TGATACCGCG	AGACCCACGC	5220
TCACCGGCTC	CAGATTTATC	AGCAATAAAC	CAGCCAGCCG	GAAGGGCCGA	GCGCAGAAGT	5280
GGTCCTGCAA	CTTTATCCGC	CTCCATCCAG	TCTATTAATT	GTTGCCGGGA	AGCTAGAGTA	5340
AGTAGTTTCG	CAGTTAATAG	TTTGCGCAAC	GTTGTTGCCA	TTGCTACAGG	CATCGTGGTG	5400
TCACGCTCGT	CGTTTGGTAT	GGCTTCATTC	AGCTCCGGTT	CCCAACGATC	AAGGCGAGTT	5460
ACATGATCCC	CCATGTTGTG	CAAAAAAGCG	GTTAGCTCCT	TCGGTCCTCC	GATCGTTGTC	5520
AGAAGTAAGT	TGGCCGCACT	GTTATCACTC	ATGGTTATGG	CAGCACTGCA	TAATTCTCTT	5580
ACTGTCATGC	CATCCGTAAG	ATGCTTTTCT	GTGACTGGTG	AGTACTCAAC	CAAGTCATTC	5640
TGAGAATAGT	GTATGCGGCG	ACCGAGTTGC	TCTTGCCCGG	CGTCAATACG	GGATAATACC	5700
GCGCCACATA	GCAGAACTTT	AAAAGTGCTC	ATCATTGGAA	AACGTTCTTC	GGGGCGAAAA	5760
CTCTCAAGGA	TCTTACCGCT	GTTGAGATCC	AGTTCGATGT	AACCCACTCG	TGCACCCAAC	5820
TGATCTTCAG	CATCTTTTAC	TTTCACCAGC	GTTTCTGGGT	GAGCAAAAAC	AGGAAGGCAA	5880
AATGCCGCAA	AAAAGGGAAT	AAGGGCGACA	CGGAAATGTT	GAATACTCAT	ACTCTTCCTT	5940
TTTCAATATT	ATTGAAGCAT	TTATCAGGGT	TATTGTCTCA	TGAGCGGATA	CATATTTGAA	6000
TGTATTTAGA	AAAATAAACA	AATAGGGGTT	CCGCGCACAT	TTCCCCGAAA	AGTGCCACCT	6060
GACGTCTAAG	AAACCATTAT	TATCATGACA	TTAACCTATA	AAAATAGGCG	TATCACGAGG	6120
CCCTTTTCGTC	TCGCGCGTTT	CGGTGATGAC	GGTGAAAACC	TCTGACACAT	GCAGCTCCCC	6180
GAGACGGTCA	CAGCTTGCT	GTAAGCGGAT	GCCGGGAGCA	GACAAGCCCG	TCAGGGCGCG	6240
TCAGCGGGTG	TTGGCGGGTG	TCGGGGCTGG	CTTAACATATG	CGGCATCAGA	GCAGATTGTA	6300
CTGAGAGTGC	AC					6312

Figure 12. FBdelPRDSAF Sequence

1

CATATGCGGT	GTGAAATACC	GCACAGATGC	GTAAGGAGAA	AATACCGCAT	CAGGCGCCAT	60
TCGCCATTCA	GGCTGCGCAA	CTGTTGGGAA	GGGCGATCGG	TGCGGGCCCTC	TTCGCTATTA	120
CGCCAGCTGG	CGAAAGGGGG	ATGTGCTGCA	AGGCGATTAA	GTTGGGTAAC	GCCAGGGTTT	180
TCCCAGTCAC	GACGTTGTAA	AACGACGGCC	AGTGAATTCC	GATTAGTTCA	ATTTGTAAAA	240
GACAGGATCT	CAGTAGTCCA	GGCTTTAGTC	CTGACTCAAC	AATACCACCA	GCTAAAACCA	300
CTAGAATACG	AGCCACAATA	AATAAAAGAT	TTTATTTAGT	TTCCAGAAAA	AGGGGGGAAT	360
GAAAAGACCC	ACCAAATTGC	TTAGCCTGAT	AGCCGCAGTA	ACGCCATTTT	GCAAGGCATG	420
GAAAAATACC	AAACCAAGAA	TAGAGAAGTT	CAGATCAAGG	GCGGGTACAC	GAAAAACAGCT	480
AACGTTGGGC	CAAACAGGAT	ATCTGCGGTG	AGCAGTTTCG	GCCCCGGCCC	GGGGCCAAGA	540
ACAGATGGTC	ACCGCGGTTT	GGCCCCGGCC	CGGGGCCAAG	AACAGATGGT	CCCCAGATAT	600
GGCCCAACCC	TCAGCAGTTT	CTTAAGACCC	ATCAGATGTT	TCCAGGCTCC	CCCAAGGACC	660
TGAAATGACC	CTGTGCCTTA	TTTGAATTAA	CCAATCAGCC	TGCTTCTCGC	TTCTGTTTCG	720
GCGCTTCTGC	TTCCCGAGCT	CTATAAAAGA	GCTCACAACC	CCTCACTCGG	CGCGCCAGTC	780
CTCCGATAGA	CTGAGTCGCC	CGGGTACCCG	TGTATCCAAT	AAATCCTCTT	GCTGTTGCAT	840
CCGACTCGTG	GTCTCGCTGT	TCCTTGGGAG	GGTCTCCTCA	GAGTGATTGA	CTACCCGTCT	900
CGGGGCTCTT	TCATTTGGGG	GCTCGTCCGG	GATCTGGAGA	CCCCTGCCCA	GGGACCACCG	960
ACCCACCAAC	GGGAGGTAAG	CTGGCCAAGA	TCCCCGGGC	TGCAGGAATT	TATGAAATCC	1020
TTTATGGGGG	ACCCCCCCT	TTGTCAACCT	TGCTCAATT	CTTCTCCCCC	TCCGATCCCTA	1080
AGACTGATTT	ACAAGCCCGA	CTAAAAGGGC	TGCAAGGCGT	GCAGGCCCAA	ATCTGGACAC	1140
CCCTGGCCGA	ATTGTACCGG	CCAGGACATC	CACAAACTAG	CCACCCATTT	CAGGTGGGAG	1200
ACTCCGTGTA	CGTCCGGCGG	CACCGCTCTC	AAGGATTGGA	GCCTCGTTGG	AAGGGACCTT	1260
ACATCGTCTT	GCTGACCAAC	CCCACGCCCA	TAAAGGTTGA	CGGGATCGCG	GCCTGGATTC	1320
ACGCATCGCA	CGCCAAGGCA	GCCCCAAAAA	CCCCTGGACC	AGAAACTCCC	AAAACCTGGA	1380
AGTCCGCCCG	TTCGGAGAAC	CCTCTTAAGA	TAAGACTCTC	CCGTGTCTGA	CTGCTAATCC	1440
ACCTTGTCCT	TGTACTAACC	CAAAATGAAA	CTCCCAACAG	GAATGGTCAT	TTTATGTAGC	1500
CTAATAATAG	TTCCGGGCAGG	GTTTGACGAC	CCCCGCAAGG	CTATCGCATT	AGTACAAAAA	1560
CAACATGGTA	AACCATGCGA	ATGCAGCGGA	GGCAGGTAT	CCGAGGCCCC	ACCGAATCC	1620
ATCCAACAGG	TAACCTTGCCC	AGGCAAGACG	GCCTACTTAA	TGACCAACCA	AAAATGGAAA	1680
TGCAGAGTCA	CTCCAAAAAT	CTCACCTAGC	GGGGGAGAAC	TCCAGAACTG	CCCCTGTAAC	1740
ACTTTCCAGG	ACTCGATGCA	CAGTTCTTGT	TATACTGAAT	ACCGGCAATG	CAGGCGAATT	1800
AATAAGACAT	ACTACACGGC	CACCTTGCTT	AAAATACGGT	CTGGGAGCCT	CAACGAGGTA	1860
CAGATATTAC	AAAACCCCCA	TCAGCTCCTA	CAGTCCCCTT	GTAGGGGCTC	TATAAATCAG	1920
CCCGTTTGCT	GGAGTGCCAC	AGCCCCCATC	CATATCTCCG	ATGGTGAGAG	ACCCCTCGAT	1980
ACTAAGAGAG	TGTGGACAGT	CCAAAAAAGG	CTAGAACAAA	TTCATAAGGC	TATGACTCCT	2040
GAACTTCAAT	ACCACCCCTT	AGCCCTGCCC	AAAGTCAGAG	ATGACCTTAG	CCTTGATGCA	2100
CGGACTTTTG	ATATCTGAA	TACCACTTTT	AGGTACTCC	AGATGTCCAA	TTTTAGCCTT	2160
GCCCAAGATT	GTTGGCTCTG	TTTAAAACTA	GGTACCCCTA	CCCCTCTTGC	GATACCCACT	2220
CCCTCTTTAA	CCTACTCCCT	AGCAGACTCC	CTAGCGAATG	CCTCCTGTCA	GATTATACCT	2280
CCCCTCTTGG	TTCAACCGAT	GCAGTTCTCC	AACCTCGTCT	GTTTATCTTC	CCCTTTCATT	2340
AACGATACGG	AACAAATAGA	CTTAGGTGCA	GTCACCTTTA	CTAAGTGCAC	CTCTGTAGCC	2400
AATGTCAGTA	TGCCCTTATG	TGCCCTAAAC	GGGTCACTCT	TCCTCTGTGG	AAATAACATG	2460
GCATACACCT	ATTTACCCCA	AAACTGGACC	AGACTTTGCG	TCCAAGCCTC	CCTCCTCCCC	2520
GACATTGACA	TCAACCCGGG	GGATGAGCCA	GTCCCCATTC	CTGCCATTGA	TCATTATATA	2580
CATAGACCTA	AACGAGCTGT	ACAGTTTCATC	CCTTTACTAG	CTGGACTGGG	AATCACCGCA	2640
GCATTACCA	CCGGAGCTAC	AGGCCTAGGT	GTCTCCGTCA	CCCAGTATAC	AAAATTATCC	2700
CATCAGTTAA	CTAGTGAAGT	CCAAGTCTTA	TCCGGTACCA	TACAAGATTT	ACAAGACCGA	2760
GTAGACTCGT	TAGCTGAAGT	AGTTCTCCAA	AATAGGAGGG	GACTGGACCT	ACTAACCGCA	2820
GAACAAGGAG	GAATTTGTTT	AGCCTTACAA	GAAAAATGCT	GTTTTTATGC	TAACAAGTCA	2880
GGAAT'TGTGA	GAAACAAAAT	AAGAACCCTA	CAAGAAGAAT	TACAAAAACG	CAGGGAAAGC	2940
CTGGCAACCA	ACCCTCTCTG	GACCGGGCTG	CAGGGCTTTC	TTCCGTACCT	CCTACCTCTC	3000
CTGGGACCCC	TACTCACCTT	CCTACTCATA	CTAACCATTG	GGCCATGCGT	TTTCAGTCGC	3060
CTCATGGCCT	TCATTAATGA	TAGACTTAAT	GTTGTACATG	CCATGGTGCT	GGCCCCAGCA	3120
TACCAAGCAC	TCAAAGCTGA	GGAAGAAGCT	CAGGATTGAG	GCGCCTAGTG	TTGACAATTA	3180
ATCATCGGCA	TAGTATACGG	CATAGTATAA	TACGACTCAC	TATAGGAGGG	CCACCATGGC	3240
CAAGTTGACC	AGTGCCGTTT	CGGTGCTCAC	CGCGCGCGAC	GTCGCCGGAG	CGGTCGAGTT	3300
CTGGACCGAC	CGGCTCGGGT	TCTCCCGGGA	CTTCGTGGAG	GACGACTTCG	CCGGTGTGGT	3360
CCGGGACGAC	GTGACCCCTG	TCATCAGCGC	GGTCCAGGAC	CAGGTGGTGC	CGGACAACAC	3420
CCTGGCCTGG	GTGTGGGTGC	GCGGCCTGGA	CGAGCTGTAC	GCCGAGTGGT	CGGAGGTCGT	3480
GTCCACGAAC	TTCCGGGACG	CCTCCGGGCC	GGCCATGACC	GAGATCGGCG	AGCAGCCGTG	3540
GGGGCGGGAG	TTCCGCCCTG	GCGACCCGGC	CGGCAACTGC	GTGCACTTCG	TGGCCGAGGA	3600
GCAGGACTGA	NNNNCGGACC	GGTCGACTTG	TTAACTTGTT	TATTGCAGCT	TATAATGGTT	3660
ACAAATAAAG	CAATAGCATC	ACAAATTTCA	CAAATAAAGC	ATTTTTTTTCA	CTGCATTCTA	3720
GTTGTGGTTT	GTCCAAACTC	ATCAATGTAT	CTTATCATGT	CTGGATCCAG	ATCTGGGCCC	3780
ATGCGGCCCG	GGATCGATNN	NNACATGTGA	GCAAAAGGCC	AGCAAAAGGC	CAGGAACCGT	3840
AAAAAGGCCG	CGTTGCTGGC	GTTTTTCCAT	AGGCTCCGCC	CCCCTGACGA	GCATCACAAA	3900
AATCGACGCT	CAAGTCAGAG	TGGGCGAAAC	CCGACAGGAC	TATAAAGATA	CCAGGCGTTT	3960
CCCCCTGGAA	GCTCCCTCGT	GCGCTCTCCT	GTTCCGACCC	TGCCGCTTAC	CGGATACCTG	4020
TCCGCCTTTC	TCCCTTCGGG	AAGCGTGGCG	CTTTCTCAAT	GCTCACGCTG	TAGGTATCTC	4080

Figure 12. FBdelPRDSAF Sequence

2

AGTTCGGTGT	AGGTCGTTTCG	CTCCAAGCTG	GGCTGTGTGC	ACGAACCCCC	CGTTCAGCCC	4140
GACCGCTGCG	CCTTATCCGG	TAACTATCGT	CTTGAGTCCA	ACCCGGTAAG	ACACGACTTA	4200
TCGCCACTGG	CAGCAGCCAC	TGGTAACAGG	ATTAGCAGAG	CGAGGTATGT	AGGCGGTGCT	4260
ACAGAGTTCT	TGAAGTGGTG	GCCTAACTAC	GGCTACACTA	GAAGGACAGT	ATTTGGGTATC	4320
TGCGCTCTGC	TGAAGCCAGT	TACCTTCGGA	AAAAGAGTTG	GTAGCTCTTG	ATCCGGCAAA	4380
CAAACCACCG	CTGGTAGCGG	TGGTTTTTTT	GTTTGCAAGC	AGCAGATTAC	GCGCAGAAAA	4440
AAAGGATCTC	AAGAAGATCC	TTTGATCTTT	TCTACGGGGT	CTGACGCTCA	GTGGAACGAA	4500
AACTCACGTT	AAGGGATTTT	GGTCATGAGA	TTATCAAAAA	GGATCTTCAC	CTAGATCCTT	4560
TTAAATTAAA	AATGAAGTTT	TAAATCAATC	TAAAGTATAT	ATGAGTAAAC	TTGGTCTGAC	4620
AGTTACCAAT	GCTTAATCAG	TGAGGCACCT	ATCTCAGCGA	TCTGTCTATT	TCGTTTCATCC	4680
ATAGTTGCCT	GACTCCCCGT	CGTGTAGATA	ACTACGATAC	GGGAGGGCTT	ACCATCTGGC	4740
CCCAGTGCTG	CAATGATACC	GCGAGACCCA	CGCTCACCGG	CTCCAGATTT	ATCAGCAATA	4800
AACCAGCCAG	CCGGAAGGGC	CGAGCGCAGA	AGTGGTCCTG	CAACTTTATC	CGCCTCCATC	4860
CAGTCTATTA	ATTGTTGCCG	GGAAGCTAGA	GTAAGTAGTT	CGCCAGTTAA	TAGTTTGCGC	4920
AACGTTGTTG	CCATTGCTAC	AGGCATCGTG	GTGTACGCT	CGTCGTTTGG	TATGGCTTCA	4980
TTCAGCTCCG	GTTCCCAACG	ATCAAGGCGA	GTTACATGAT	CCCCCATGTT	GTGCAAAAAA	5040
GCGGTTAGCT	CCTTCGGTCC	TCCGATCGTT	GTCAGAAGTA	AGTTGGCCGC	AGTGTTATCA	5100
CTCATGGTTA	TGGCAGCACT	GCATAATTCT	CTTACTGTCA	TGCCATCCGT	AAGATGCTTT	5160
TCTGTGACTG	GTGAGTACTC	AACCAAGTCA	TTCTGAGAAT	AGTGATGCG	GCGACCGAGT	5220
TGCTCTTGCC	CGGCGTCAAT	ACGGGATAAT	ACCGCGCCAC	ATAGCAGAAC	TTTAAAAGTG	5280
CTCATCATTG	GAAAACGTTT	TCGGGGGCGA	AAACTCTCAA	GGATCTTACC	GCTGTTGAGA	5340
TCCAGTTCGA	TGTAACCCAC	TCGTGCACCC	AACTGATCTT	CAGCATCTTT	TACTTTCACC	5400
AGCGTTTCTG	GGTGAGCAAA	AACAGGAAGG	CAAAATGCCG	CAAAAAAGGG	AATAAGGGCG	5460
ACACGGAAAT	GTTGAATACT	CATACTCTTC	CTTTTTCAAT	ATTATTGAAG	CATTTATCAG	5520
GGTTATTGTC	TCATGAGCGG	ATACATATTT	GAATGTATTT	AGAAAAATAA	ACAAATAGGG	5580
GTTCCGCGCA	CATTTCCCCG	AAAAGTGCCA	CCTGACGTCT	AAGAAACCAT	TATTATCATG	5640
ACATTAACCT	ATAAAAATAG	GCGTATCACG	AGGCCCTTTC	GTCTCGCGCG	TTTCGGTGAT	5700
GACGGTGAAA	ACCTCTGACA	CATGCAGCTC	CCGGAGACGG	TCACAGCTTG	TCTGTAAGCG	5760
GATGCCGGGA	GCAGACAAGC	CCGTCAGGGC	GCGTCAGCGG	GTGTTGGCGG	GTGTCGGGGC	5820
TGGCTTAACT	ATGCGGCATC	AGAGCAGATT	GTAAGTATAT	TGCAC		5885

Figure 13. hCMV10A1 Sequence

1

AGATCTCCCG	ATCCCCTATG	GTCGACTCTC	AGTACAATCT	GCTCTGATGC	CGCATAGTTA	60
AGCCAGTATC	TGCTCCCTGC	TTGTGTGTTG	GAGGTCGCTG	AGTAGTGC	GAGCAAAATT	120
TAAGCTACAA	CAAGGCAAGG	CTTGACCGAC	AATTGCATGA	AGAATCTGCT	TAGGGTTAGG	180
CGTTTTGCGC	TGCTTCGCGA	TGTACGGGCC	AGATATACGC	GTTGACATTG	ATTATTGACT	240
AGTTATTAAT	AGTAATCAAT	TACGGGGTCA	TTAGTTCATA	GCCCATATAT	GGAGTTCCGC	300
GTTACATAAC	TTACGGTAAA	TGGCCCGCCT	GGCTGACCGC	CCAACGACCC	CCGCCCATTG	360
ACGTCAATAA	TGACGTATGT	TCCCATAGTA	ACGCCAATAG	GGACTTTCCA	TTGACGTCAA	420
TGGGTGGACT	ATTTACGGTA	AACTGCCAC	TTGGCAGTAC	ATCAAGTGTA	TCATATGCCA	480
AGTACGCCCC	CTATTGACGT	CAATGACGGT	AAATGGCCCC	CCTGGCATT	TGCCCAGTAC	540
ATGACCTTAT	GGGACTTTCC	TACTTGGCAG	TACATCTACG	TATTAGTCAT	CGCTATTACC	600
ATGGTGATGC	GGTTTTGGCA	GTACATCAAT	GGGCGTGGAT	AGCGGTTTGA	CTCACGGGGA	660
TTTCCAAGTC	TCCACCCAT	TGACGTCAAT	GGGAGTTTGT	TTTGGCACCA	AAATCAACGG	720
GACTTTCCAA	AATGTCGTAA	CAACTCCGCC	CCATTGACGC	AAATGGGCGG	TAGGCGTGTA	780
CGGTGGGAGG	TCTATATAAG	CAGAGCTCTC	TGGCTAACTA	GAGAACCCAC	TGCTTAACTG	840
GCTTATCGAA	ATGTCGACTG	AGAACTTCAG	GGTGAGTTTG	GGGACCCTTG	ATTGTTCTTT	900
CTTTTTCGCT	ATTGTAAAT	TCATGTTATA	TGGAGGGGGC	AAAGTTTTC	GGGTGTTGTT	960
TAGAATGGGA	AGATGTCCCT	TGTATCACCA	TGGACCCCTA	TGATAATTTT	GTTTCTTTTCA	1020
CTTTCTACTC	TGTTGACAA	CATTGTCTCC	TCTTATTTTC	TTTTCATTTT	CTGTAACCTT	1080
TTCGTTAAAC	TTTAGCTTGC	ATTTGTAACG	AATTTTAA	TTCACTTTGT	TTTATTTGTC	1140
AGATTGTAAG	TACTTCTCT	AATCACTTTT	TTTTCAAGGC	AATCAGGGTA	TATTATATTG	1200
TACTTCAGCA	CAGTTTTAGA	GAACAATTGT	TATAATTAAA	TGATAAGGTA	GAATATTTCT	1260
GCATATAAAT	CTGTGGCTGG	GTGGAAATAT	TCTTATTGGT	AGAAACAAC	ACATCCTGGT	1320
CATCATCTCG	CCTTTCTCTT	TATGGTTACA	ATGATATACA	CTGTTTGAGA	TGAGGATAAA	1380
ATACTCTGAG	TCCAAACCGG	GCCCCTCTGC	TAACCATGTT	CATGCCTTCT	TCTTTTCTCT	1440
ACAGCTCCTG	GGCAACGTGC	TGGTTGTTGT	GCTGTCTCAT	CATTTTGGCA	AGGATCGGCC	1500
GGAACAGCAT	CAGGACCGAC	ATGGAAGGTC	CAGCGTTCTC	AAAACCCCTT	AAAGATAAGA	1560
TTAACCCGTG	TAAACCCCTT	ATGGTCATGG	GGGTCTATTT	AAGAGTAGGG	ATGGCAGAGA	1620
GCCCCATCA	GGTCTTTAAT	GTAACCTGGA	GAGTCACCAA	CCTGATGACT	GGGCGTAGCC	1680
CCAATGCCAC	CTCCCTTTTA	GGAACGTGAC	AAGATGCCTT	CCCAAGATTA	TATTTTGATC	1740
TATGTGATCT	GGTCGGAGAA	GAGTGGGACC	CTTCAGACCA	GGAACCATAT	GTCCGGTATG	1800
GCTGCAAATA	CCCCGGAGGG	AGAAAGCGGA	CCCCGACTTT	TGACTTTTAC	GTGTGCCCTG	1860
GGCATACCGT	AAAATCGGGG	TGTGGGGGGC	CAAGAGAGGG	CTACTGTGGT	GAATGGGGTT	1920
GTGAAACCAC	CGGACAGGCT	TACTGGAAGC	CCACATCATC	ATGGGACCTA	ATCTCCCTTA	1980
AGCGCGGTAA	CACCCCTTGG	GACACGGGAT	GCTCCAAAAT	GGCTTGTGGC	CCCTGCTACG	2040
ACCTCTCCAA	AGTATCCAAT	TCCTTCCAAG	GGGCTACTCG	AGGGGGCAGA	TGCAACCCTC	2100
TAGTCCTAGA	ATTCACTGAT	GCAGGAAAAA	AGGCTAATTG	GGACGGGCCC	AAATCGTGGG	2160
GACTGAGACT	GTAACCGACA	GGAACAGATC	TATTACCAT	GTTCTCCCTG	ACCCGCCAGG	2220
TCCTCAATAT	AGGGCCCCGC	ATCCCCATTG	GGCCTAATCC	CGTGATCACT	GGTCAACTAC	2280
CCCCCTCCCG	ACCCGTGCAG	ATCAGGCTCC	CCAGGCCTCC	TCAGCCTCCT	CCTACAGGCG	2340
CAGCCTCTAT	AGTCCCTGAG	ACTGCCCCAC	CTTCTCAACA	ACCTGGGACG	GGAGACAGGC	2400
TGCTAAACCT	GGTAGAAGGA	GCCTATCAGG	CGCTTAACCT	CACCAATCCC	GACAAGACCC	2460
AAGAAATGTT	GCTGTGCTTA	GTGTGCGGAC	TCTCTTATTA	CGAAGGAGTA	GCGGTCTGTG	2520
GCACTTATAC	CAATCATTCT	ACCGCCCCGG	CCAGCTGTAC	GGCCACTTCC	CAACATAAGC	2580
TTACCCTATC	TGAAGTGACA	GGACAGGGCC	TATGCATGGG	AGCACTACCT	AAAACTCACC	2640
AGGCCCTTAT	TAACACCACC	CAAAGTGCCG	GCTCAGGATC	CTACTACCTT	GCAGCACCCG	2700
CTGGAACAAT	GTGGGCTTGT	AGCACTGGAT	TGACTCCCTG	CTTGTCCACC	ACGATGCTCA	2760
ATCTAACCAC	AGACTATTGT	GTATTAGTTG	AGCTCTGGCC	CAGAATAATT	TACCACTCCC	2820
CCGATTATAT	GTATGGTCAG	CTTGAACAGC	GTACCAATA	TAAGAGGGAG	CCAGTATCGT	2880
TGACCCTGGC	CCTTCTGCTA	GGAGGATTAA	CCATGGGAGG	GATTGCAGCT	GGAATAGGGA	2940
CGGGGACCAC	TGCCCTAATC	AAAACCCAGC	AGTTTGAGCA	GCTTCACGCC	GCTATCCAGA	3000
CAGACCTCAA	CGAAGTCGAA	AAATCAATTA	CCAACCTAGA	AAAGTCACTG	ACCTCGTTGT	3060
CTGAAGTAGT	CCTACAGAAC	CGAAGAGGCC	TAGATTTGCT	CTTCCTAAAA	GAGGGAGGTC	3120
TCTGCGCAGC	CCTAAAAGAA	GAATGTTGTT	TTTATGCAGA	CCACACGGGA	CTAGTGAGAG	3180
ACAGCATGGC	CAAACCTAAG	GAAAGGCTTA	ATCAGAGACA	AAAACCTATT	GAGTCAGGCC	3240
AAGGTTGGTT	CGAAGGGCAG	TTTAATAGAT	CCCCCTGGTT	TACCACCTTA	ATCTCCACCA	3300
TCATGGGACC	TCTAATAGTA	CTCTTACTGA	TCTTACTCTT	TGGACCCTGC	ATTCTCAATC	3360
GATTAGTTCA	ATTTGTTAAA	GACAGGATCT	GAGTAGTCCA	GGCTTTAGTC	CTGACTCAAC	3420
AATACCACCA	GCTAAAGCCT	ATAGAGTACG	AGCCATAGGG	CGCCTAGTGT	TGACAATTAA	3480
TCATCGGCAT	AGTATACGGC	ATAGTATAAT	ACGACTCACT	ATAGGAGGGC	CACCATGGCC	3540
AAGTTGACCA	GTGCCGTTCC	GGTGCTCACC	GCGCGCGACG	TCGCCGGAGC	GGTCGAGTTC	3600
TGGACCGACC	GGCTCGGGTT	CTCCCGGGAC	TTCTGTGGAG	ACGACTTCGC	CGGTGTGGTC	3660
CGGGACGACG	TGACCCTGTT	CATCAGCGCG	TCCAGGACC	AGGTGGTGCC	GGACAACACC	3720
CTGGCCTGGG	TGTGGGTGCG	CGGCCTGGAC	GAGCTGTACG	CCGAGTGGTC	GGAGGTCGTG	3780
TCCACGAACT	TCCGGGACGC	CTCCGGGGCC	GCCATGACCG	AGATCGGCGA	GCAGCCGTGG	3840
GGGCGGGAGT	TCGCCCTGCG	CGACCCGGCC	GGCAACTGCG	TGCACTTCGT	GGCCGAGGAG	3900
CAGGACTGAN	NNNCGGACCG	GTCGA				3925